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Alpine and Other Abandoned Towns along the Great Northern Railroad near Stevens Pass, Washington, 1890-1930

Stacy Marie Stanley
Central Washington University

ALPINE AND OTHER ABANDONED TOWNS ALONG THE GREAT NORTHERN RAILROAD NEAR STEVENS PASS, WASHINGTON, 1890-1930

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Stacy Marie Stanley

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We hereby approve the thesis of

Stacy Marie Stanley

Candidate for the degree of Master of Science

APPROVED FOR THE GRADUATE FACULTY

17 March 2014 _____
Dr. Patrick Lubinski, Committee Chair

17 March 2014 _____
Dr. Steve Hackenberger

17 March 2014 _____
Dr. Steven Moore

12 June 2014 _____
Dean of Graduate Studies

ABSTRACT

ALPINE AND OTHER ABANDONED TOWNS ALONG THE GREAT NORTHERN RAILROAD NEAR STEVENS PASS, WASHINGTON, 1890-1930

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Despite the wealth of research on the early transcontinental railroads of the West, including certain areas in Washington State, there is little known about the railroad towns, camps and logging communities that arose due to the construction of the Great Northern Railroad in the Stevens Pass area. This thesis summarizes some of the information on the history of the study area, as well as results of a field investigation of archaeological remnants of one railroad town, the town of Alpine. Alpine was a short-lived town established during construction of the railroad ca. 1892 or a little later in 1910, and demolished ca. 1930. It was a remote logging town with access only by rail, and community life strongly influenced by its major employer, the Nippon (later Alpine) Lumber Company. Archaeological remnants extant today are limited to scattered artifacts and seven building foundation remnants obscured by thick vegetation.

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CHAPTER I

INTRODUCTION AND STUDY AREA

By July 1930, the lumber mill for the Alpine Lumber Company was closed, and the townsite was razed (Carlson 2003; Sanborn Map Company 1926). This was the end for Alpine, a remote railroad town near Stevens Pass in the Cascade Range of Washington. The town had been established only 20-38 years before. The town may have begun as a work camp during the construction of the Great Northern railroad in 1892-1893 (Roe 1995), although this is uncertain, but it certainly existed by 1910 with the building of the first lumber mill (Nippon Lumber Company 1918).

Given their short life, remoteness, and lack of standing structures, there has been little study of such towns. They are even less conspicuous than ghost towns, which at least have standing structures to evoke curiosity about past life in them. The initial building of the Great Northern railroad line thorough the Cascades was a major undertaking and important to the settlement of Washington State. The short-lived history of the town of Alpine and a study of its archaeological remnants can shed some light on one example of a vanished way of life.

In this thesis, I examine the history and archaeology of company towns along the Great Northern Railroad through Stevens Pass. I summarize the history of building of the railroad and records of railroad towns, most now abandoned, from Leavenworth to Everett, Washington. I focus on Alpine as a particular example, with a summary of the extant historical record and my own field investigation of the archaeological remnants.

Locating and understanding current and past railroad towns requires a basic understanding of the political and cultural conditions that existed prior to and during the formation of the area. Studying the political, social and cultural conditions that existed gives the investigator a historical framework, or proper context that allows a greater understanding of the importance of historic railroad towns. Developing a historical context is also necessary in determining whether existing structures, objects, sites, or buildings should be part of a future management plan. Similarly, the biophysical setting provides a larger context for the study. The following sections depict the nature of the Northern Cascade Range study area and its early inhabitants.

Biophysical Setting

This thesis study is located in the north-central region of Washington State, approximately sixteen miles west of the summit at Stevens Pass. The focus is on the former Great Northern Railroad (GNR) and the now abandoned railroad town of Alpine, circa (1890 to 1974). The former GNR is currently owned and operated by the Burlington Northern Santa Fe Railroad, which parallels U.S. Highway 2 in the study area. The town of Alpine lies six miles east of Skykomish and is located in King County in T 26N; R 12E, Section 26 at an elevation of 1640 ft.

The Cascade Range is broken up into three general sections (Northern, Central, and Southern), with the Northern Cascades stretching from the Fraser River in Canada south to Snoqualmie Pass at Interstate 90 in Washington State. The southern end of the Northern Cascades is the primary focus of this thesis (see Figure 1). In this area, there

are two volcanoes, Mt. Baker and Glacier Peak. Mt. Baker, located at 48.786° N 121.82° W has a height of 10,778 feet (United States Geological Survey [USGS] 2007). Glacier Peak is located at 48.112° N 121.113° W and has a height of 10,541 feet (USGS 2007). At only 240 feet lower than Mt. Baker, Glacier Peak is one of the most remote mountains of the Cascade Range.

Figure 1. Location of study area (Google Maps 2013). The town of Alpine is indicated at the "A."

The North Cascades developed over several million years. It is a dense and compact area that was developed by tectonic terranes docking themselves against the North American continent (Tabor and Haugerud 1999). These terrains came from elsewhere and can explain for the diversity of geologic material and the vast mineral deposits found throughout the Cascades. The minerals of interest in and around the study

area include "chalcopyrite, pyrite and bornite, carrying small amounts of silver and gold" (Weaver 1912:62). Copper was also sought after.

As the Cascade Range formed, streams, rivers, and lakes were created. The main watershed to the east is the Wenatchee River watershed. This watershed is approximately "1,370 square miles with 230 miles of major streams and rivers" (Washington State Department of Ecology [DOE] 2007). There are many tributaries draining from the Sub-Alpine area within the Alpine Lakes and Glacier Peak Wilderness area (DOE 2007). The water from these areas flows into Wenatchee Lake and from the lake it descends through Tumwater Canyon down to Leavenworth. The watershed to the west of Stevens Pass that is included in the study area is the Snoqualmie-Skykomish watershed. There are several small creeks that flow from the north of the study area into the Skykomish River, which roughly parallels U.S. Highway 2 and the railroad. From the top of Stevens Pass, the railroad follows the South Fork of the Skykomish River west to Index, where it flows into the Skykomish River. From there, it flows west past Monroe, where it joins the Snohomish River, and then into Puget Sound.

There are two climate factors that influence these watersheds and those are the Cascade Mountains and westward winds. The Cascade Mountains receive 150 in of rain annually (Beckey 1973). Daily winter temperatures are never below 10° F or above 80° F during the summer. Afternoon summer temperatures usually average about 60 ° F (Beckey 1973). The summer can bring violent thunderstorms, which can cause flashfloods on the local watershed.

Vegetation in the Stevens Pass area varies widely by elevation. There are three ecoregions, these include the Northern Cascade lowland forests, highland forests and Subalpine/Alpine forests (Fuerstenberg et al. 2013). The lowland forest, located at the lowest elevation, encompasses upslope valleys of King County's major river systems, including the study area in the Skykomish River Valley. This ecoregion consists of western hemlock, western redcedar and Douglas-fir. Hardwood species within the lowland forest include Sitka aspen, Douglas maple, vine maple, and red alder, while the understory foliage consists of Oregon grape, salal, twin flower and kinnikinnick (Beckey 1973). At the location of the Alpine townsite, I observed Douglas-fir, big leaf maple, vine maple, western hemlock, skunk cabbage, lady fern, deer fern, stinging nettle, and devil's club. Local trees of the area were used for building of the railroad and were also cut and processed at local mills for houses and other construction projects.

Cultural Context

In the early nineteenth century, the inhabitants of the area west of Stevens Pass included Southern Coast Salish peoples, particularly the Skykomish Indians, whose primary village sites were along the North Fork of the Skykomish River (Ruby et al. 1986; Suttles and Lane 1990). This tribe is part of the Northern Lushootseed language group (Suttles and Lane 1990). They resided in the area until the Point Elliot Treaty of 1855, when they were moved to the Tulalip Reservation (Ruby et al. 1986). East of the Stevens Pass divide was the territory of other Salish speakers like the Wenatchee, who

lived along the Wenatchee River (Miller 1998). The Wenatchee are grouped by anthropologists into the Middle Columbia River Salishans (Miller 1998).

The initial Euro-American use of the region was by fur trappers. The fur trade laid the foundation for later settlement in the Pacific Northwest and Canada. Land based traders scouted the coast line and developed trading relations with native tribes west of the Cascades, as well as inland. Trappers and traders explored nearly every corner of the Pacific Northwest, organized systems of trade and trails over the vast region, pursued extensive and complex relationships with many of the local tribes; trading goods for knowledge and furs. No specific information could be found on trappers in the Stevens Pass study area. However, the Hudson Bay Company traders made mentions in their journals of the Skykomish Indians who would trade furs for goods with them at Fort Nisqually (Ruby et al. 1986) in present day Tacoma.

The collecting of furs was the beginning of large-scale extraction of natural resources in the Pacific Northwest. It created an interior commerce with the trading of goods between trappers and native tribes and an exterior commerce (Lambert 1979) that brought in various companies all vying for access to the same resources. There were four fur trading companies that dominated the Pacific Northwest: the Hudson Bay Company, the Pacific Fur Company, Rocky Mountain Fur Company and the Northwest Fur Company, which made a major contribution to the development of Washington State. David Thompson (former employee of the Hudson Bay Company) located the headwaters of the Columbia River, extensively mapped western Canada and the isolated

interior of Washington State and established the first trading post, the "Spokane House" (Fuller 1952:81) near present-day Spokane, Washington.

The next wave of Euro-American presence in the Pacific Northwest was with the arrival of missionaries, with the first mission being established in 1836 (Writers' Program 1941). However, the Pacific Northwest was no stranger to religion. It had already appeared with earlier explorers and was being taught to local Native American tribes. The Hudson Bay Company held regular services for tribes near its outposts (Buckham and Nash 1917).

Fur trapping began to fade out by the mid-1840s as settlers began to move into the area that would later become Washington State. Naturally, settlement focused on the lower elevation parts of the state, while mountainous areas like Stevens Pass were not a focus for settlement in the mid-1800s. Instead, most activity in the study area was for extraction of the mineral and timber of the mountains. These two topics are covered with separate sections below. Towns were not established in the study area between modern-day Leavenworth and Everett until the 1870s (Roe 1995; Williams 2004).

The Great Northern Railroad reached Leavenworth, Washington in 1892 (Williams 2004). Within the year, tracks were laid across the Northern Cascades to Everett, Washington and then into the final terminal in Seattle, Washington in 1893 (Schwantes 1989; Tate 1986). Before the construction of the rail line, there were a few locations along the proposed Great Northern route that had already been settled by early prospectors. During construction, camps were established at suitable locations along the projected route in order to feed and house laborers. Once the railroad work was

completed, the camps became scheduled stops and were run by railway or local mill workers. By the early 1900s, each stop averaged 100-200 residents (Roe 1995: 67). A detailed discussion of stops along the railroad between Leavenworth and Everett is provided in Chapter IV.

Logging

As the Great Northern stretched its rail line across the Northern Cascades, lumber mills began to appear everywhere. Virgin timber heavily blanketed the land and was in demand. Beams, ties, and trestles were needed for railroad construction, as well as mining and logging operations. Raw timber and shingles were needed to build the new towns that were growing along the tracks, which meant instant local markets for timber products. Amongst the many small and portable lumber mills throughout the Northern Cascades, there were four major logging companies within my study area. They include the Nippon Lumber Co. (which is discussed in detail in Chapter VI), the Lamb-Davis Lumber Co., the Great Northern Lumber Co., and the Bloedel and Donavan Lumber Company.

The Lamb-Davis Lumber Co. (LDLC) was incorporated in 1903 in Leavenworth (Roe 1995:104). The company purchased several stands along "Stevens Pass and Nason Creek" and built a mill (see Figure 2), a boarding house for its employees, and a small hospital in Leavenworth (Roe 1995:104). They also bought all remaining lots in the original Leavenworth townsite, and "acquired the local water company and built an electric plant, making the town one of the first in the state to enjoy electric lights" (Roe

1995:105). The LDLC also built a dam across the Wenatchee River to act as a storage pond for logs. The dam use took into consideration local Native American subsistence fishing, so the lumber company "set aside 400 feet of riverbank above and below the dam for their use" (Roe 1995:105).

Figure 2. Undated photograph of the Lamb Davis Lumber Company (Kinney-Holck 2011:32).

In 1926 (Kinney-Holck 2011) the LDLC, due to financial difficulties was sold to Great Northern Lumber Company (GNLC). Despite the name, this lumber company was not associated with the Great Northern Railroad. According to Roe (1995), the GNLC maintained a decent operation and provided camps for its crews. "Camps" were made up of moveable railcars that could be parked on a siding as logging crews moved along. The GNLC provided good food and clean beds to attract laborers. The company wanted to attract a different kind of logger, the kind that would "spend his off-duty money on movies and ice cream" (Roe 1995:112), rather than alcohol.

The Skykomish Lumber Company (Figure 3), called the Bloedel and Donavan Lumber Company after 1917, was the only major business located in Skykomish,

Washington in the early 1900s (Roe 1995). The mill prospered as a result of the presence of Great Northern Railroad. The railway purchased the timber through Bloedel and Donavan Lumber Co. for construction projects such as depots, bridges, rails and housing and the railroad provided a way to transport timber from the mill to other markets in the east. The mill was sold in 1945 to an eastern outfit and continued to operate till it closed in 1950 (Williams 2004).

Figure 3. Undated photograph of Skykomish Lumber Company mill and millpond (Carlson 2009a:68). Photographer unknown.

Mining

Mining had great importance to the development of the Pacific Northwest. The lure of gold brought an influx of people of all types and ethnicities. It caused uninhabited areas to become settled, sparked the interest in other natural resources and their exploitation, such as timber and coal, and stimulated the building of railroads.

It is unknown if gold or other mineral resources were being mined in Washington prior to the mid-1800s. The first official acknowledgment of mineral resources for the

state of Washington was made in 1833 by Dr. William Fraser Tolmie of the Hudson Bay Company, and it was not till 1848 that the first mining occurred with the removal of coal from the "banks of the Cowlitz River" (Hill 1939:89), located in the southwest region of the state. The first extraction of gold occurred in 1855 near Fort Colville (Fuller 1952; Hill 1939; Schwantes 1989).

The first mining claims within the Cascade region in King County did not occur until 1874 in the Silver Creek area (Weaver 1912). No further development on mines was completed until 1882, when prospectors began mining on the north fork of the Skykomish River, near Troublesome and Silver Creek (Weaver 1912). By 1890 the towns of Galena and Mineral City were laid out and the first settlement was located at Index. Also about this time, placer gold was located in the Sultan basin; as a result many prospectors fled to the area staking claims along the Skykomish River valley to Gold Bar on the west, and Silver Creek to the east.

The Index Mining District illustrates the nature of mining in the study area. According to the Washington Geological Survey (Weaver 1912), the Index Mining District had more than 20 mines, the earliest dating to 1891 and known as the Merchant Mine. The majority of mines staked claims from 1897 to 1901. The mines contained as little as two claims and up to as many as 36, with some of the properties being heavily developed. For example, the Ethel Consolidation Mine, incorporated in 1905 as the Ethel Copper Mining Company, built bunkhouses, offices, a large construction plant, 3,200 feet of tunnels, upraises and shafts a few miles north of the town of Index. There was also

electric power using Ethel Creek to run the concentrating plant and lighting the mines and buildings.

Figure 4. Overview of the Sunset Mine, ca. 1929 (University of Washington Digital Collections 2013a). This was one of many copper mines in the Index mining District. Lee Picket photograph.

The Index Mining District also included granite quarries. Granite was not only used as a building material but also used for road bed for the Great Northern railway. One of the granite quarries was the Western Granite Works in Index. Incorporated in 1904 and benefitting due to its proximity to the GNR line, this quarry and other granite quarries in the district prospered in the early 1900s. "The Washington State Capital steps are made from Index Granite" (Carlson 2009a:38). Due to the Great Depression slowing construction in general, and cement becoming the choice building material, "all valley granite quarries ceased operation by 1932" (Carlson 2009a:38).

CHAPTER II

METHODS AND FILE SEARCH RESULTS

Methods used for the purpose of this thesis included archival research, an online search of previously recorded sites and surveys within the vicinity of Stevens Pass, literature review on archaeological, historical and ethnographic sources, and field survey, supplemented by online research to identify and date field data. As part of my research methods I traveled to several United States Forest Service offices, museums and the Skykomish historical society. These research methods allowed me to compile a historic context and provide for subsequent research of the Alpine site materials. This chapter also discusses the methods used in the field survey I carried out in 2013.

Archival and Historical Research Methods

Archival records were searched at the Okanogan/Wenatchee Forest Service office in Wenatchee, Washington. Information pertaining to the town of Alpine was sought out at the Leavenworth and Skykomish Forest Service offices, the Wenatchee Valley Museum, local bookstores, and the Skykomish Historical Society. A Great Northern Railroad Historical Society meeting in Skykomish was also attended to seek further information. The meeting provided no information but contacts were made.

Telephone, email, and in-person consultations with people involved in the history of study area and its surrounding area aided in providing primary sources and filling in gaps of information on photographs and who to contact for more information. Bob Kelly

of the Skykomish Historical Society was a tremendous help and met with me in person and answered all my questions by via email. Tim Ratzloff, an advocate of the town of Alpine, was also a tremendous help in the beginnings of my field research. Ratzloff personally gave me a tour of the abandoned town, showing me where he thought features were located and answering any questions I had and continued to be asset via email.

When I began my archival research very little information was known on the study area, except for the information compiled with the 1988 site form for Alpine (Whitlam 1988). Included with the form were photographs, the Nippon Lumber Company annual banquet and dance programs from 1917 and 1918, a 1925 Alpine Lumber Company Thanksgiving Festival and Dance program, a 1920 calendar with the events of the last year, a list of personnel who worked for the plant, newspaper articles, and a single 1974 memoir by former resident Mary Daheim. These sources are used extensively in the following chapters.

Archaeological File Search and Results

Background research was completed during the pre-field work phase of the study. A review of known historic archaeological sites and report files from the Department of Archaeology and Historic Preservation's WISSARD online data base and the State Historic Preservation Office (SHPO) data base were completed before the field survey. A search of known historic and archaeological sites and associated survey reports within a one mile radius of the location of Alpine was made on the WISSARD system on January 29, 2014 revealed three previously recorded sites with three associated survey

reports. The Stevens Pass Historic District lies about 1 mile east of the Alpine location, and stretches from here east about 12 miles over the top of Stevens Pass.

The three recorded sites are 45KI400 (Nippon-Alpine), 45KI420 (Lower Martin Camp), and FS-2270 (Tote Road segment). Site 45KI400 has an associated report on a survey for a U.S. Highway bridge replacement and road realignment about 0.5 miles east of Alpine (Boreson 1992). Site 45KI420 has two associated reports, one by BOAS (1989) for a survey of Martin Creek about 1.5 miles east of Alpine. The second report associated with 45KI420 is a survey report by Onat et al. (1993) for the Iron Goat Testing Project east of Martin Creek. Site FS-2270 has no associated reports.

The site form for the town of Alpine (45KT400) was completed in 1988 by U.S.F.S. archaeologists and Rob Whitlam of the Office of Archaeology and Historic Preservation (Whitlam 1988). The site form narrative description is "historic archaeological site of milltown and possible earlier ethnic Japanese settlement. Mill foundations at north side of tracks—residential [unreadable] south." Cultural materials observed were "concrete mill foundation, metal stacks, domestic artifacts, and wooden remains." The site sketch map shows the site bisected by train tracks running east-west and by a creek running north-south. In the northwest is the access road, to the northwest lie "earthen features," to the southwest lies a foundation, and to the southeast lie "Residential Area Debris" and "Earthen Reservoir." The site is listed on WISSARD as "potentially eligible" for the National Register of Historic Places (NRHP).

Site 45KI420 was originally recorded in April, 1989, by U.S.F.S archaeologists E. Gleason and J. Cheungin, who called it Lower Martin Camp (Gleason and Cheungin

1989). The area was described as a short term occupation site with associated historic debris, including solder-dot tin cans and aqua glass. In 1990, a National Register nomination form was completed, apparently based on an additional visit and shovel probing by BOAS, Inc. (Hess and Stump 1990). They observed historic artifacts on the surface within a 18 x 16 foot log enclosure, additional materials buried in shovel probes in and around the enclosure, and in the adjacent streambed. They interpret the site as remnants of a fur trapper's cabin used between the 1890s and 1940s. The site is listed on WISSARD as "potentially eligible" for the NRHP, implying that the nomination was never forwarded or was rejected.

Site FS02270 was recorded in November 1984 by U.S.F.S archaeologist V. A. Cavazos (1984). The site is a 244 m long segment of road lined in places with granite boulders. It is thought to be a portion of an historic "tote road" which was built in 1892, and shown on 1894-1897 General Land Office plat maps. The road was used to bring supplies to those working on the Great Northern Railroad. The site is listed on WISSARD as "potentially eligible" for the NRHP.

Archaeological Field Methods

Field work began on August 27, 2013. The 27th and 28th of August, I recorded on my own. The 29th of August and 1st of September, a fellow archaeologist assisted me in recording. On October 12th, I returned to the site to recheck some information.

I chose to break the Alpine area up into four sections for pedestrian survey. The east-west running railroad was used to split the area into a northern and southern section.

Carroll Creek runs directly through the center of the study area and I chose to make this creek my east/west boundary for the southern section, located on the south side of the railroad tracks. Starting in the southwest section of the southern portion, west of Carroll Creek, I and my crew member used the "non-exclusive gang survey" (King 1978:17) method due to the thick vegetation and downed trees. We would walk parallel to each other in an east or west direction at 10-20 m apart, following the topography of land, and splitting off to check likely areas outside our transect area. In areas where the soil had sloughed off of the hillsides, we would group together or break away to find the easiest way through the vegetation and then spread back out.

As artifacts or features were identified, flagging tape was tied to vegetation near the artifact or feature at eye level. Once an artifact or feature was found, an additional examination of the immediate area was completed in an attempt to find additional artifacts or features within a 30-meter radius; this allowed me to determine the boundary of each scatter. To determine the boundary of the entire Alpine town site, survey continued until no artifacts were observed for at least 30 m, thus determining the end point for the site in that direction.

All diagnostic artifacts and features were mapped as points, lines, concentrations, or polygons using a Garmin GPSMAP 60Cx GPS unit. Limited sky visibility in the narrow mountain valley setting made satellite reception difficult, preventing us from getting more accurate readings. The estimated precision of the GPS readings was <10 m, perhaps as good as 1-2 m (Garmin International 2009:74, 80).

Visual documentation was carried out using a Fuji Finpix Z camera. All artifacts and features were recorded in a systematic manner, which included a description and measurements using feet and inches. The recorded artifacts and features including the railroad tracks, structures, artifacts and isolate finds were recorded separately. Artifacts were grouped into concentrations called Debris Scatters or left as isolated finds, depending on whether other materials were found within 30 m. Additional notes were made if a scatter contained loci or any other pertinent archaeological data (e.g. material type or feature attributes).

CHAPTER III

THE GREAT NORTHERN RAILROAD

Introduction

The idea of building a transcontinental railroad had been around for some time before construction was granted by the Pacific Railroad Act of 1862 and 1864 (Renehan 2007) The first transcontinental railroad to reach the Pacific Ocean was completed in 1869 (Ambrose 2000). The transportation system that was created changed America forever by revolutionizing the economy, creating faster transportation, and opening up new territory that was previously inaccessible. It also allowed goods to be transported much faster at cheaper rates. The most significant impact that the transcontinental lines had on the West was that it standardized industrial practice.

The development of the railroad changed engineering: distance, elevation and curvature of the terrain had to be calculated precisely. Rules were created to govern train operators and crews; drinking was prohibited for all employees to ensure safety. Time zones were created. The West's expanding rail network created a need for scheduling trains to keep operations safe. Railroad mangers took it upon themselves, without government support, to resolve the issue. The act of creating standard time showed the limitless power that railroads had in transforming the West. Locomotives provided consistent service; there had been no previous mode of transportation that could provide such service. Trains could travel through snow and ice or plows could be dispatched to clear track lines. Steamships and stagecoaches were subject to delays caused by weather.

Dietary habits changed as a result of the arrival of the railroads. Items such as fruit, which were once a luxury item for those living in isolated areas, were now readily available. The rail allowed for the development of orchards in the Pacific Northwest, linking them to markets all over the country. Trains in the West also made it possible for settlers to grow crops and raise livestock in areas that were once beyond human limitations. Extension lines and main branch lines allowed towns to prosper. Because of the railroads, shipping rates became lower than that of steamships, allowing businessmen, farmers and ranchers to profit from their endeavors.

James Hill is credited with the vision and wherewithal to build a northern transcontinental railroad. Also known as the Red River Pirate, the man who made the Pacific Northwest, the evil one of Homesteaders, and most frequently as the Empire Builder (Hungenford 1906; Martin 1976), Hill forever changed the fate of the Pacific Northwest. Born September 16, 1883 into a pioneering family, James J. Hill was raised in a small Quaker community of Rockwood, Ontario (Strom 2004; White 1996; Johnson 1993). At the age of 14, his father passed away, leaving Hill to end his formal education and take up a clerking position to help support his family. At the age of 18, Hill left Canada and made his way to the United States, hoping to gain passage aboard a ship heading for the Orient. Running low on funds and failing to find work, Hill headed to St. Paul, Minnesota in 1856 (Wood and Wood 1979). He arrived a few days too late to join the Red River Brigade and travel with them to the West. He stayed in St. Paul.

In his first few years in St. Paul, Hill worked several jobs gaining experience in the freight and steamboat industry. Hill's first brush with the rail industry came in 1878

(Malone 1991) when he teamed up with a group of investors, Norman Kittson, Donald Smith and George Stephens. Their first investment was in the St. Paul & Pacific Railroad. More interested in the stock than the rail line, they were able to make the ailing line profitable. In 1879, Hill and his partners incorporated the St. Paul & Pacific into the St. Paul, Minneapolis & Manitoba Railroad Company, which became known as the "Manitoba" (Malone 1991:178). Hill and his team wasted no time and quickly laid track through the Red River Valley of North Dakota and into Canada. Due to land grants, control of exporting agricultural goods from the valley and proper management of the newly overhauled line, the Manitoba line prospered. After their success in the Red River Valley, Hill envisioned what he could do if he extended his rail line westward across the Plains to the Rocky Mountains. That vision ultimately resulted in the Great Northern Railroad (GNR).

The Beginning of the Great Northern Railroad

The organization of the GNR not only came out of want, but also out of necessity. Many regional railroads similar to Hill's were facing the decision of whether they should become a transcontinental line or be absorbed by larger rail companies that were willing to take on the daring task. In 1889, Hill decided to commit to the extension of the Manitoba line to the Pacific (Martin 1976). He knew the Manitoba line would either have to acquire other rail lines or build its own route to the Pacific Ocean. Seeing the poorly built and managed Northern Pacific achieve transcontinental status in 1883 made Hill envious (Foote 1882).

Building the transcontinental line required far more than planning and labor than his previous ventures, and it needed stock that was freely traded on Wall Street. This posed a problem for Hill, as many adversaries were willing to buy large amounts of stock to bankrupt his company. Hill, from the beginning, had intended that the newly formed GNR should, for the most part, be owned by the owners of the Manitoba line, and he created an elaborate scheme to attain this end.

In his scheme, $40 million in GNR stock was to be issued (Martin 1976:377). Current owners of Manitoba shares could buy $100 shares in the GNR for $50 each (Martin 1976:377). The remaining money from the purchase price was made up by stock the Manitoba road held in various subsidiaries corporations. The stock was then turned over to the Great Northern, "subject to a "mortgage" represented by $8 million of collateral trust bonds, which the Great Northern would pay off with the cash proceeds of its preferred issue" (Martin 1976:377). In other words, the subsidiary stock was "spun-off" by the Manitoba line to the stockholders of the Manitoba (who were the primary owners) and then "spun-back" to complete the payment for the preferred stock. Although such complicated maneuvering caused controversy and led to a stockholder lawsuit, it settled quickly. It did not take long for everyone to realize the owners of the Manitoba line were also the owners of the new railroad. The future road to the Pacific Ocean was laid at the 1889 Manitoba line annual meeting:

> On September 16, 1889 he [Hill] organized the Great Northern Railway Company around the charter of his subsidiary Minneapolis & St. Cloud Company. The

> Great Northern promptly leased the property of the Manitoba for 999 years. At midnight, January 31, 1890 the Great Northern officially took over 2,770 miles of road, together with all properties incidental to operation, of the St. Paul, Minneapolis & Manitoba Railroad. At its next board meeting the Great Northern directors requested the management to "extend its lines westwardly from some suitable point in Montana to Puget Sound [Holbrook 1955:111].

Determining the Route through the Rockies

When the Manitoba Line reached Montana in 1887 (Holbrook 1955), they needed to find a route to Puget Sound to complete their rail line. Great Falls was at this point the farthest west that the Great Northern Railroad had reached. There were several possible routes being considered from Great Falls west across the Rockies. The one in which Hill was interested was named Marias Pass, and its exact location was uncertain. Hill acquired a skilled group of men to locate an appropriate route. One of Hill's biggest fears was that after "putting everything he had into his greatest work," he would later find out that he built the railroad in the wrong place (Martin 1976:379). The best possible route would be the straightest route with the lowest mileage and least possible grades.

Elbridge H. Beckler was hired as chief engineer to oversee the Pacific extension. Beckler's experience included working in the Rocky Mountains for both the Central Pacific Railroad and the Northern Pacific Railroad (Hidy and Hidy 1969:346) before being hired on to Hill's St. Paul, Minneapolis and Manitoba Railroad (Martin 1991). Under his supervision, Beckler hired several skilled engineers, one of them being John F.

Stevens. Stevens was chosen to oversee several surveys, including the Marias Pass route through the Montana Rockies and the Washington route through the Cascades.

The story of Stevens' mission surveying the location of Marias Pass has been recanted in numerous texts (Baugh 2005; Bradshaw 1989; Flandrau 1971; Guthrie 2004; Schmollinger 2003; Stevens 1936). Of all the explorations that took place in the mid to late 1800s, locating Marias Pass was probably one of the most significant. Marias Pass had been located in previous explorations but Stevens was the first location engineer to judge its practicality. Before heading out in December of 1889, Stevens studied an 1840 map by Robert Greenhow, as well as survey reports by Isaac Stevens, A. W. Tinkham, and James Doty (Guthrie 2004: 30; Hidy and Hidy 1969). There had been several parties in the late 1800s that searched for the low pass, but never found its location (Bradshaw 1989; Guthrie 2004; Yenne 2005).

Stevens set out with a wagon, horse, mule and a Flathead Indian guide. Leaving the guide and mule behind partway up the mountain, Stevens set out on foot, following a series of streams until he crossed the Continental Divide and dropped down into the western drainage (Solomon 2005). Certain he had located the lost pass; he checked his barometer at the summit, "barely 5000 feet above sea level" (Martin 1976:383). He had located the pass. Stevens returned back to headquarters to report his findings to Hill.

The Route through Washington State

Once the location work at Marias Pass was complete and Stevens was able to leave the construction details to those back in Montana, he and his assistant C. F. B.

Haskell traveled to Washington State to finish locating the last part of the Pacific Extension from Spokane Falls to Puget Sound (Wood and Wood 1979). There had been earlier attempts to locate a railroad route through the North Cascades. An early government attempt was made by George McClellan in 1854 (Marsh 2004). McClellan, who would later become general of the Union Army, was surveying to find the easiest railroad route to Puget Sound from the East (Marsh 2004). Another official exploration took place in 1867, under General James G. Hilton (Roe 1995). Hilton and his men did not find any suitable routes. The Northern Pacific Railroad also made an attempt to locate a pass through the Cascade Mountains in 1867 (Roe 1995).

When Stevens and Haskell arrived in Washington State in 1890 (Wood and Wood 1979), Haskell was to determine the route from the east side of the state, while Stevens explored the Cascade Range (Wood and Wood 1979). In order for a route to be determined through the Cascades, Stevens would have to wait on Haskell's findings on where he would choose to cross the Columbia River. Coulee City, Washington, offered the only possible Columbia River Valley route crossing, an old stream bed "100 miles long, and in some places up to 5 miles wide and, 1,000 feet deep" (Wood and Wood 1979:131). The Northern Pacific was already building their line through Coulee City at the time (Wood and Wood 1979). Only a few weeks old, the town was booming with activity (Wood and Wood 1979).

While Haskell kept busy exploring eastern Washington, Stevens made his way back to the Wenatchee area. While surveying Lake Wenatchee he located a stream flowing into the lake from the south and noticed that the stream turned west into the high

country. On a prior trip to the Cascades summi, he had spotted a drainage in the main range and he believed that the creek he observed at Lake Wenatchee could flow nowhere but into this area (Wood and Wood 1979). No further exploration was conducted by Stevens; he was ordered to return to headquarters in Waterville, Washington. In his place, he sent Haskell to Lake Wenatchee with orders to follow the newly discovered creek to its headwaters. On the 15th of September, 1890, Haskell left from Waterville and made his way to the creek near Lake Wenatchee (Heffelfinger1935; Wood and Wood 1979). Following the creek to its headwaters he located the pass and named it Stevens Pass (*Railroad Gazette* 1895:874). He carved "Stevens Pass" (see Figure 5) on a cedar tree before continuing west to Skykomish River (Wood and Wood 1979:131; Hidy 1988: 75).

As the Pacific extension route through Washington was being finalized, construction had already begun in Montana, at Pacific Junction near Havre. By 1891, they extended the line as far as Kalispell, Montana and by 1892, grading crews had made it as far as Icicle, located at the mouth of Tumwater Canyon and bordering present-day Leavenworth (Williams 2004). At Leavenworth, a few log structures were constructed but the town was abandoned when the GNR purchased "a mile strip of land, extending four hundred feet on each side of the track" (Williams 2004:146). This location was an ideal spot for the Great Northern before proceeding through the Cascade Mountains. There was an abundance of timber, water and level ground to build. A depot, coal bunkers and a roundhouse were erected (Williams 2004).

Figure 5. Blazed tree with "Stevens" carved by C. B. Haskell in 1890 (Carlson 2009a:15). The photograph was taken in 1893 by Norwegian photographer Anders Beer Wilse who was documenting a building built by the GNR. He knew of the blazed tree, located it and photographed it (Carlson 2009a:15).

To speed completion of the Stevens Pass segment, the Great Northern built from both the west and east side simultaneously. The GNR contracted the Shepard, Henry and Company of St. Paul to build from both ends (Hidy and Hidy 1969:349). Starting in Everett, Washington the company laid track, following the left bank of the Skykomish River and up the south fork towards the summit of Stevens Pass to meet up with track layers from the east (Hidy and Hidy 1969:349). As the eastern crews began work at the head of Tumwater Canyon, they had a relatively easy time laying track; one of the major problems was the massive trees that stood in the way of the survey route (Roe 1995).

Another issue the GNR faced during its construction was how to cross the summit of the Northern Cascades. The summit was to be crossed at an elevation of 4,030 feet (Gaynor 1927). Stevens used his resourceful skills to create a series of switchbacks,

"three on the eastern slope and five on the western slope" (Solomon 2005:83) that involved sharp curves and steep grades (some exceeding 4%) as a temporary means to get over the summit until a tunnel could be built (Figure 6). Stevens had designed a rail system stretching over 12 miles (Roe 1995:63) that involved a series of spurs to allow the train to navigate the sharp turns of track at each switchback. At each switchback, the locomotive which was pulling cars would enter the spur and then reverse direction to push the cars back onto the mainline. A locomotive was used at both ends of the train to push and pull the cars 6.4 miles from Cascade City to the summit (Roe 1995:63). A similar method was used for the 5.75 mile descent down the other side of the mountain (Roe 1995:63), although the descent also involved using brakemen, who "were out, on top of the box cars, with stool brake clubs, tightening the brake wheels to help hold train speed" (Gaynor 1927:11).

A total of 1,727 miles or track (Hidy 1988) was laid from St. Paul to Seattle. It took only two and half years to complete the rail line from Havre, Montana to Everett, Washington. The completion of the Great Northern transcontinental rail line was such a remarkable task, yet it inspired no celebration. The rail line was completed in the dead of winter atop the Cascades and was not deemed a desirable place for festivities (Hidy 1988). James J. Hill was confined to his home in St. Paul due to sickness, Beckler had left the GNR to pursue other work and Stevens was busy completing other survey projects. In the end only two GNR officials were present, the superintendent and the district superintendent. And on January 16, 1893 (Sherman 2004), these two men drove the last spike near Scenic, Washington (Figure 7).

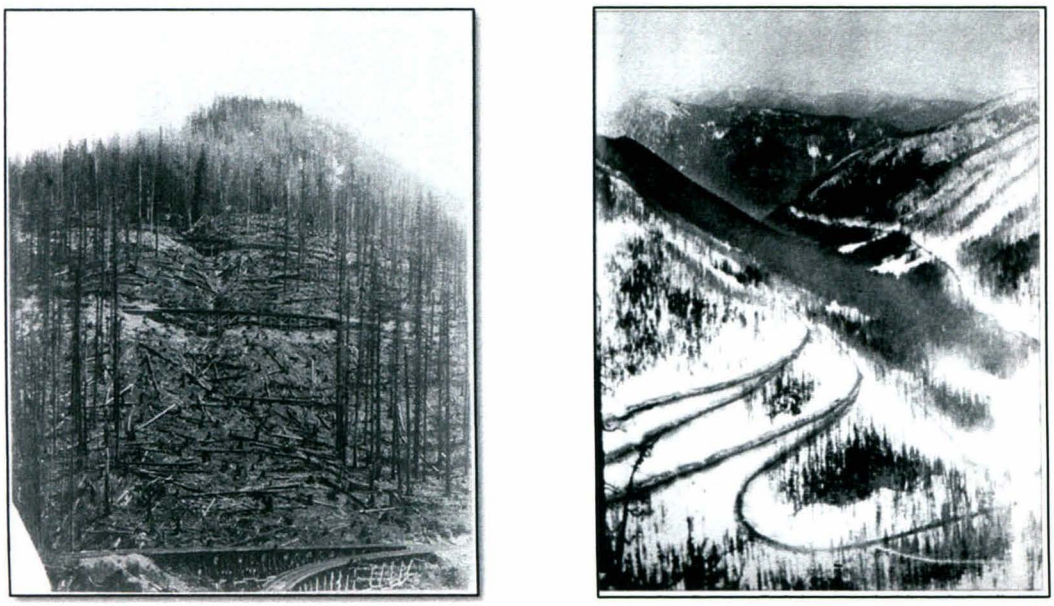


Figure 6. Photographs of the original Cascade switchbacks. Left: Switchbacks on the west side of the Cascade Range ca. 1899. (Library of Congress Prints and Photographs Digital Repository 2013). Photograph taken by A. B. Wilse. Right: Photograph of switchbacks, taken from the top of Skyline Ridge ca 1890s (Carlson 2009a:29). Photgrapher unknown.

After the original route was completed and traffic began moving, the GNR began considering improvements. The switchbacks were a concern. This method was an ingenious way to climb the pass, but when winter conditions occurred and snow accumulated it was almost impossible to get over the mountains. Crews would "fight snow and slides as long as possible" (Gaynor 1927:11) using snowplows or shoveling by hand. Many times the train would lay buried in snowdrifts for long periods of time. James Hill, realizing that he could not use force to overcome this obstacle and would refuse to admit defeat to the elements decided to build a tunnel between Wellington on the west side and Old Cascade Station on the east side (see Figure 8).

Figure 7. Last spike for the Great Northern Railroad near Scenic, Washington ca. 1893 (Carlson 2009a:17).

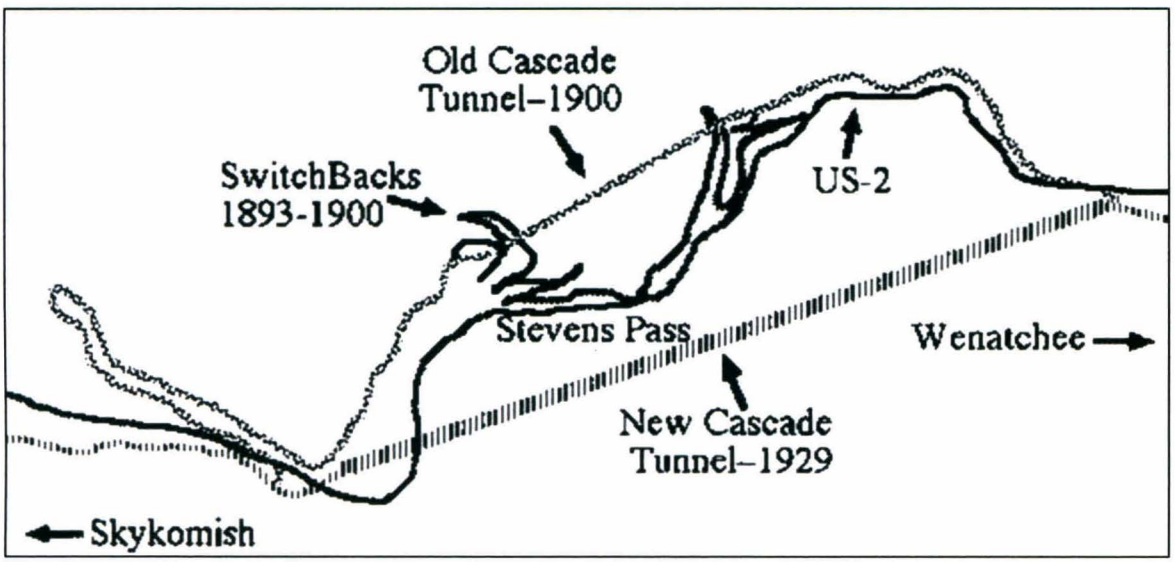


Figure 8. Diagram showing the original switchbacks, Old Cascade Tunnel, the New Cascade Tunnel and current Highway 2 (Boyd 2013).

The tunnel was one of Stevens' major improvement projects for the Pacific Extension. After reviewing surveys of four years earlier, Stevens re-surveyed the tunnel route and work began in 1897 (Hidy and Hidy 1969). The two and one-half mile tunnel was completed in a little over three years. After its completion in 1900, it continued to be used till 1928 (Roe 1995) when the new Cascade Tunnel, also called the Eight Mile Tunnel, was built. While building the new Eight Mile Tunnel, the GNR decided to "electrify the entire section from Wenatchee to Skykomish, thus avoiding the multiple changes of locomotives from steam to electric and vice versa" (Roe 1995:92).

The construction of the new tunnel took three years, which was all that was permitted by the Great Northern. Manual labor, dynamite and an air compressed drill were used to make their way through the mountain. Most of the debris rock was granite and was utilized for roadbed fill beyond both ends of the tunnel (Roe 1995). The largest advantage of the new tunnel was that it eliminated some of the dangerous curves and avalanche problems associated with the previous system. It is still in use today, as the longest tunnel in the United States and the second longest in North America (Roe 1995).

Railroad Towns through Stevens Pass

As the railroad was being built through Stevens Pass, new camps, stations and towns arose along the rail line. At some of these camps, stations were built for the railroad, and some of these camps where stations were built evolved into towns. Figure 9 shows all of the stops on the GNR as of the 1920s, while Table 1 summarizes all of the stations, towns and camps known between Leavenworth and Everett.

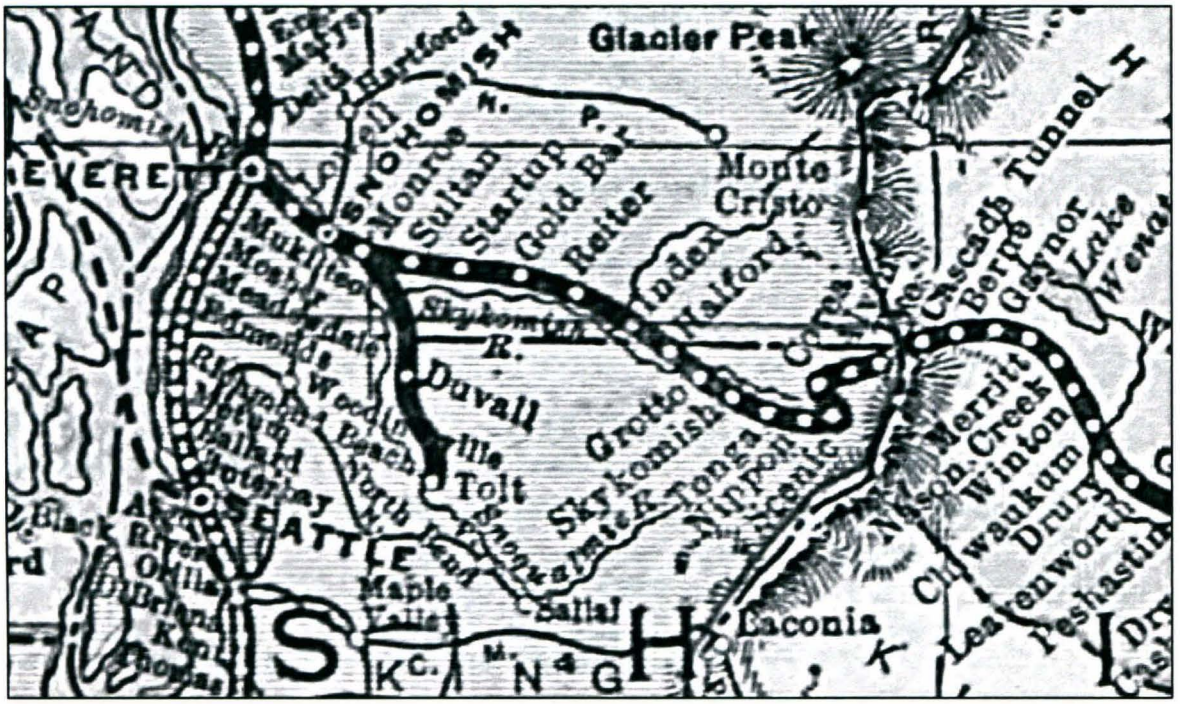


Figure 9: Location of stops along the Great Northern Railroad from Leavenworth to Everett, Washington circa 1920s. Map from Washington Secretary of State (2013).

Table 1. Stops along the GNR from Leavenworth to Everett in Alphabetical Order

Stop Name	Dates	Depot	Description	Reference
Alpine	1892/93-1928	Yes (2)	Railroad camp/lumber mill town	Roe 1995
Alvin	1930s	Yes	No information available	(Location on Figure 9)
Baring	1892-present	Yes	Flag stop/ town	Roe 1995
Berlin (Miller River)	1892-1933+	Yes	Flag stop, mill, mines	Roe 1995
Berne	1892-1950s	Yes (2)	Station, work camp for Eight Mile Tunnel	Roe 1995, Williams 2004
Cascade Tunnel	1890-1910+	Yes	Construction camp/ weigh station	Roe 1995
Corena	1920s	?	No information available	(Location on Figure 9)
Chiwakum	1892-1902+	?	Stock ranch, mill, store, hotel and fish hatchery	Roe 1995
Drury	1920s	?	No information available	(Location on Figure 9)

Table 1 (Continued)

Stop Name	Dates	Depot	Description	Reference
Everett	1892-present	Yes	Western terminus	Williams 2004
Gaynor	1920s	?	No information available	(Location on Figure 9)
Gold Bar	1889-present	Yes	Roundhouse/town/lumber mill	Williams 2004
Grotto	1920s-1950s	Yes	Grotto Lumber Mill	Roe 1995
Halford	1892-?	No	Water stop	Roe 1995
Heybrook	1892-?	?	Sawmill/ town	Roe 1995
Icicle	1892-?	No	Few cabins	Williams 2004
Index	1893-present	Yes	Copper mine/ saw mill/ granite quarry	Cameron 2013
Leavenworth	1892-present	Yes	Roundhouse/coal bunkers/sawmill/	Williams 2004
Lowell	1920s	?	No information available	(Location on Figure 9)
Martin City	1892-93	No	Town	Roe 1995
Merritt	1892-1969s	Yes	Flag stop, post office and hotel	Roe 1995
Mill Creek Camp	1925-28	Yes	Construction camp	Roe 1995
Monroe	1891-present	Yes	Town	Williams 2004
Nason Creek	1920+	?	No information available	(Location on Figure 9)
Reiter	1920+	?	No information available	(Location on Figure 9)
Scenic	1892-present	Yes	Water tower/ resort/ construction camp	Roe 1995
Skykomish	1899-present	Yes	Town	Williams 2004
Snohomish	1859-present	Yes	Town	Williams 2004
Start Up	1860s-	Yes	Town	Williams 2004
Sultan	1870s-present	Yes	Town	Williams 2004
Tonga	?	?	No information available	(Location on Figure 9)

Table 1 (Continued)

Stop Name	Dates	Depot	Description	Reference
Wellington (Tye)	1892-1930s	Yes	Town	Roe 1995
Winton	1892-2000s	Yes	Construction camp/ town/lumber mill	Roe 1995

[1] For more detailed information, see below

For some of the towns listed in Table 1, there is more available information. Each with additional information is discussed below. All information on these towns is from Roe (1995) unless otherwise noted. The first town in alphabetical order from Table 1 with more information is Alpine. Alpine is the focus of this thesis and its history will be discussed in detail in Chapter VI. The next is Alvin, which, based on a historical photograph, at least had a depot (Figure 10).

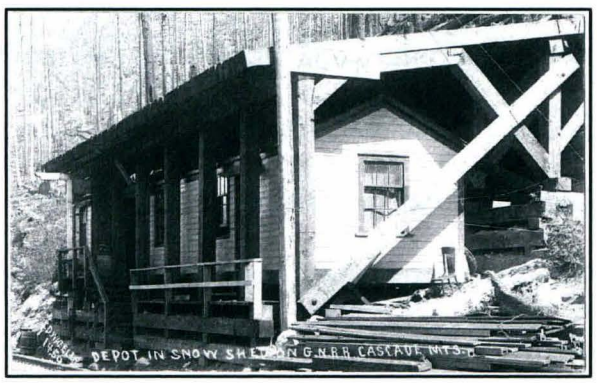


Figure 10. Great Northern depot at Alvin ca. 1930s (Washington State Railroads Historical Society [WSRHS] 2013). The photo is labeled "D. WHEELER 14.50. DEPOT IN SNOW SHED ON G.N.R.R , CASCADE MTS."

Baring was established in 1892 and was noted as a flag stop. It consisted of a post office, hotel, the Baring granite quarry and a shingle mill. No other information was obtained. As of 2010, Baring was unincorporated (United States Census Bureau [USCB] 2012) and had a population of 220 (City-Data.com 2013).

Berlin, established in 1892, was originally a flag stop. The town contained a shingle mill, the Great Republic mining headquarters as well as the headquarters of other small mining companies. The population may have been around 500 in the 1900s, but a fire caused by a spark from a locomotive burned the town down. Residents fled before the fire burned down the mine, concentrator, a shingle mill, a sawmill, two grocery stores, a lath mill, an assay office, two hotels, five saloons, and thirty houses. The GNR reimbursed residents for their losses but most people chose not to rebuild. The name Berlin was considered embarrassing during WWI and the town was renamed Miller River at that time. The Apex mine continued to operate until the late 1920s, and the school operated until 1933.

Berne, established in 1892, consisted of two depots, one on the main line and the second located 100 yards from the west switch. One of the depots is shown in Figure 11. Berne was listed as a station but before the construction on the eight mile tunnel, it was reported that only one man (a track walker) lived there. Berne became a construction camp at the east portal of the Eight Mile Tunnel. After construction of the tunnel, the camp burned, and the site was occupied by a watchman and section crewman into the 1950s.

Figure 11. Great Northern Railroad depot at Berne ca. 1929 (WSRHS 2013). Photographer unknown.

Cascade Tunnel originally was a way station, but became a home to workmen working on the Cascade Tunnel in 1890. The town housed about five hundred people, most of which were men. There was a massive fire that burned down every business the year the Cascade Tunnel was completed in 1900, but since the tunnel was completed there was no need for a town anymore. Only a depot (Figure 12), substation, a few railroad spurs and a few other buildings remained as of 1910.

Figure 12. Great Northern Railroad depot at Cascade Tunnel, ca. 1915 (University of Washington Digital Collections 2013b). Photograph by J. D. Wheeler.

Chiwakum was a town located where the Wenatchee River enters Tumwater Canyon, originally established in 1892 by homesteader Thomas Dillion. After its initial row as a stock ranch, a mill, store, hotel, post office, and fish hatchery were constructed at the location. The mill operated until 1902.

Everett is an extant town where the Great Northern western terminus was built in 1892 (Clark 1970). The town of Everett was originally filed as a 50-acre town site of "Port Gardner" which was withdrawn and refilled under a new name of Everett Land Company. There were rumors in the late 1880s that James J. Hill was planning to build

his western terminus in Everett that prompted a flood of investment into the area, thus Everett was the result. The depot is shown in Figure 13. As of the 2010 census, Everett had a population of 103,305 (USCB 2012).

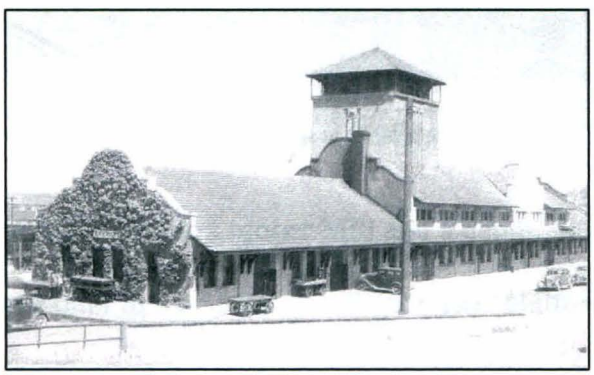


Figure 13. Great Northern Railroad depot at Everett ca. 1920 (WSRHS 2013). This photo is labeled "GREAT NORTHERN DEPOT, EVERETT, WN. 'YI' A 156." Photographer unknown.

Gold Bar contained a roundhouse and a depot (see Figure 14). In 1889, prospectors discovered gold on a river bar along the Skykomish River a little over seven miles east of Sultan City (Williams 2004). The prospectors called the area Gold Bar and it boomed, mostly due to timber. In 1915 the Great Northern relocated a roundhouse from Skykomish to Gold Bar (Williams 2004). Short lived due to economic reasons, the roundhouse was moved back to Skykomish in 1922 (Williams 2004). As of the 2010 census, Gold Bar had a population of 2,080 (USCB 2012).

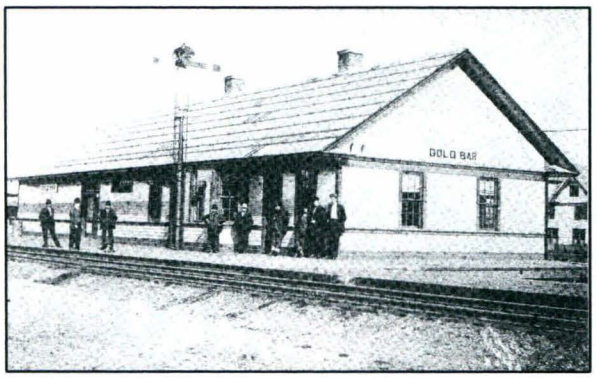


Figure 14. Great Northern Railroad depot at Gold Bar ca. 1916 (WSRHS 2013).

Grotto consisted of the Grotto Lumber Mill and a depot. It appears on the 1920s map (Figure 9) and was extant in the 1950s (see Figure 15). Halford and Heybrook were established ca. 1892. Halford consisted of a water stop, houses, two taverns, a restaurant, and an open air dance hall. The water tower is shown in Figure 16). The GNR also kept a quarry there for materials used for the construction of the roadbed. Heybrook consisted of a saw mill, a few homes and a flag stop. Icicle was extant before the construction of the railroad, and consisted of a few log structures (Williams 2004).

Figure 15. Great Northern Railroad depot at Grotto, ca. 1950s (WSRHS 2013). Photographer unknown.

Please note: An image on this page has been redacted due to copyright concerns.

Figure 16. Halford community on the Stevens Pass Highway showing watertower in background (University of Washington Digital Collections 2013c). Photograph has "HALFORD ON STEVENS PASS HIGHWAY." and "PICKETT 1874," but is undated. This is one of many photographs by Lee Pickett, the official Great Northern Railway photographer in the 1920s (University of Washington 2014).

Index was platted through a mining claim in 1893 and was incorporated as a town 1903 (Cameron 2013). The town boomed due to a copper mine, saw/shingle mill, granite quarry and logging. The depot is shown in Figure 17. As of the 2010 census, Index had a population of 178 (USCB 2012).

Figure 17. Great Northern Railroad depot at Index ca. 1913 (WSRHS 2013). Photograph has "MEETING THE NOON TRAIN AT INDEX," "PICKET PHOTO CO 2157."

Leavenworth is an extant town that originally held the headquarters of the Cascade Division of the Great Northern Railroad. Great Northern graders made it to Leavenworth in 1892 (Williams 2004) but the town was not incorporated until 1906 (Roe 1995). The town consisted of a depot, roundhouse, coal bunkers, a switching yard and a lumber mill near the turn of the 20th century (Figure 18). The Great Northern held its headquarters there until 1925 (Kinney-Holck 2011). After the GNR closed and removed their operations, the sawmill closed and the town stagnated. By the 1950s (Roe 1995) the town was in danger of complete extinction.

Figure 18. Photographs of Great Northern Railroad depots at Leavenworth. Left: Undated photograph of GNR depot, water tower and coalbunkers (Kinney-Holck 2011:23). Right: Photograph of Great Northern depot in Leavenworth, ca. 1929 (University of Washington Digital Collections 2013d).

In 1962 the Leavenworth Chamber of Commerce contacted the University of Washington's Bureau of Community Development for assistance (Roe 1995). The bureau provided ways for the locals to find their own solutions, to teach them how to work together and find resources to help their dying town. Thus, the Improvement for Everyone project or project LIFE was created and was to be their first major step towards

economic recovery (Price and Miller 1997). In 1964 the locals came to a decision to use a Bavarian theme, "which was inspired by the Danish Village of Solvang located in California" (Kinney-Holck 2011:9). Once patrons began remodeling at their own expense, it was decided to begin attracting tourists by hosting festivals. Several of the festivals created in the town's newly remodeled style still exist today such as the Autumn Leaf Festival (Kinney-Holck 2011). As of the 2010 census, Leavenworth had a population of 1,974 (USCB 2012).

Martin City only existed for about two years from 1892-93, during the construction of the Great Northern Railroad. There was a movie house, a restaurant and some taverns (Roe 1995). No other information was obtained about Martin City.

Merritt was originally settled by Inez Forsyth in 1892 along with her seven children on a 160 acre parcel (Roe 1995). Once her children were grown she operated a boarding house in Leavenworth, where she met and married Thomas William. They moved back to Merritt and opened a hotel. Merritt consisted of a flag stop and a post office (Western Historical Publishing 1904:736). The depot and water tower were extant in 1969 (see Figure 19), and the hotel burned down in 1980 (Roe 1995).

Figure 19. Great Northern Railroad depot at Merritt in 1969 (WSRHS 2013). Photographer unknown.

Mill Creek Camp (see Figure 20) only existed during the construction of the Eight Mile Tunnel from 1925-1928 (Roe 1995). Monroe is an extant city that was established in 1891 but not incorporated until 1902 (Williams 2004). The GNR placed a depot in the town. As of the 2010 census, Monroe had a population of 17,346 (USCB 2012).

Figure 20. Mill Creek construction camp ca. 1926 (University of Washington Digital Collections 2013e). Photograph is labeled "MILL CREEK CAMP, 6 16 26, PICKET PHOTO CO 8234."

Scenic was established in 1892 and was heavily populated during the construction of the Cascade Tunnel. The GNR facilities included a water tower and a depot (see Figure 21). In 1904, a resort was built to house the guest visiting the Scenic Hot Springs, but burned down in 1908. A new hotel was built in 1909, but was soon in trouble again. The resort was in line with the relocation of the GNR through the Eight Mile Tunnel. The hotel was destroyed. Scenic was not listed in the 2010 census data (USCB 2012), and may be abandoned.

Figure 21. Great Northern depot at Scenic ca. 1920 (WSRHS 2013). Photographer unknown.

Skykomish was originally settled by John Maloney, an easterner who came west to Seattle, Washington where he found work as an axman on a railroad survey crew. When the work ran out he headed towards eastern Washington and encountered John F. Stevens who was searching for the northern route through the Cascades. Maloney signed up as part of Stevens' survey crew. When the crew reached present day Skykomish, Maloney and Haskell

> knew from their survey the flats where Skykomish stands now would be a division point for the railroad, and they made an agreement. Knowing the building of the railroad would require all manner of support systems they positioned themselves to provide such services. Each would stake a claim on one side of the river with the understanding he would cede his claim to the one on whose the side the rails ended up [Carlson 2009b:1].

The area was originally known as Foss River but was changed to Skykomish in 1893 (Carlson 2009b) when the GNR reached the area, also within the same year a post

office was established. The GNR facilities at Skykomish included a depot (see Figure 22). As of the 2010 census, Skykomish had a population of 199 (USCB 2012).

Figure 22. Great Northern depot at Skykomish in 1954 (WSRHS 2013). Photographer unknown.

Snohomish was established in 1859 (Williams 2004). During the 1850s Congress authorized the military to build a road from Fort Steilacoom to Fort Bellingham, and the road would have passed through present day Snohomish (Williams 2004). It was never built, but in 1859 two men "F.F. Cady and F. C Ferguson staked claim on the north side of the river where the city center is located and named it Cadyville" (Williams 2004:14). The town was later renamed Snohomish City and then Snohomish. Cady built and operated the "Blue Eagle Saloon" which also served as the post office and courthouse (Williams 2004:14). He was also involved in a freight supply business along the Snohomish River and engaged in exploration. To help strengthen the town they established a trade route through the Cascades, exploring and naming a route Cady Pass, which was apparently little used. Logging began around the 1860s and in 1888 the Seattle, Lake Shore and Eastern Railroad laid track to the area (Williams 2004). The Great Northern reached Snohomish in 1892 (Blake 2007). During rail construction two bridges were built to cross the Pilchuck and Snohomish rivers. Great Northern facilities

at town included a depot (see Figure 23). As of the 2010 census, Snohomish had a population of 9,124 (USCB 2012).

Figure 23. Great Northern depot at Snohomish ca. 1959 (WSRHS 2013). Photographer unknown.

Startup was founded in the early 1860s by Francis Marion Sparling (Williams 2004). He developed the area including building a hotel and began selling buildings and lots to bring in more settlers and businessmen. The community was referred to as Wallace initially but the name was changed to Startup in 1901. It was thought that Startup never had a Great Northern depot (Williams 2004) but there are images to verify its existence (see Figure 24). Date of construction for the depot is unknown but the images suggest that it was built around the early 1900s.

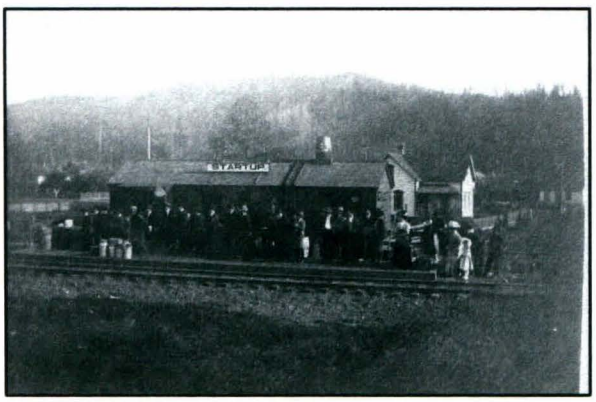


Figure 24. Great Northern depot at Startup ca. 1900s (WSRHS 2013). Photographer unknown.

Sultan was established in the late 1800s and remains occupied today. The area around Sultan had already been inhabited as early as 1870 when gold was discovered. Furthering the growth of the town was the arrival of the Great Northern Railroad in 1892 (Williams 2004) and the building of a depot. As of the 2010 census, Sultan had a population of 4,664 (USCB 2012).

Wellington or Tye, located at the western end of the Cascade Tunnel, was established sometime around 1892-93 when the GNR built their rail line through the area. It was originally settled by construction, railroad, and maintenance crews. The depot is shown in Figure 25. Due to the town's location it became the headquarters for electric-motor work and during construction of the Cascade Tunnel, "as many as 600 people, mostly men" lived in the town (Roe 1995:70) Wellington was renamed Tye after the 1910 Wellington disaster, which was when 98 passengers died as a result of a train being struck by an avalanche just outside of town (Krist 2007). The name was changed out of respect for the dead and to disassociate Wellington with the Great Northern Railroad.

When the Eight Mile Tunnel was completed (around 1928) the local residents dispersed to neighboring towns causing Wellington to become abandoned.

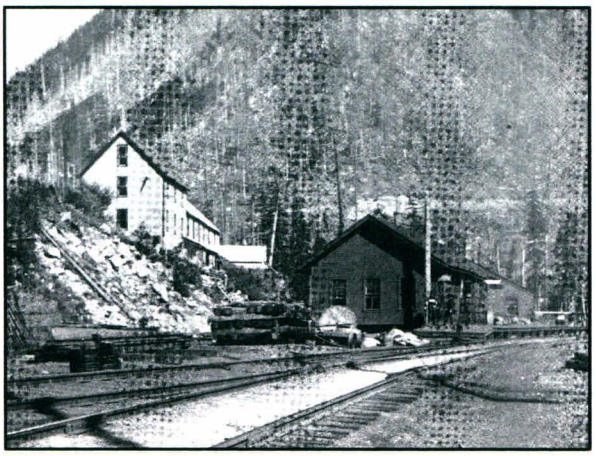


Figure 25. Great Northern depot at Wellington ca. 1908 (WSRHS 2013). Photographer unknown.

Winton was originally a railroad camp, established sometime around 1892-93 during the construction of the GNR rail line. The town has gone by many names. It was originally called Woodspur, then Nason by railroad crews, and eventually Winton. There was a lumber mill in town owned and operated by C. A. and Arden Harris from 1914-1916 (Roe 1995). The lumber mill made ties for the Great Northern Lumber Company. There was also a depot (see Figure 26) and grocery store. The town continued to thrive well into the 2000s until the last lumber mill closed its doors. Only a few farms still exist today. Winton was not listed in the 2010 census data (USCB 2012), and may be abandoned.

Figure 26. Great Northern depot at Winton Washington ca. 1950s (Bray 2013). Photographer unknown.

CHAPTER IV

THE ARCHAEOLOGY OF ALPINE

The previous chapter provided some historic context for the Great Northern Railroad and history of the town of Alpine. In this chapter, I discuss the physical remnants of the town as recorded during a pedestrian survey of the town site undertaken by the author and an assistant from August to October, 2013. During the survey, the area was covered with a dense canopy and an underlying cover of thick vegetation and duff with numerous downed trees, affording poor ground surface visibility (Figure 27). There were areas with better visibility and visible artifacts, apparently due to people removing duff in search of artifacts prior to my survey.

Figure 27. Air photo of Alpine's location, indicated with push pin marker (Google Earth 2013). Note the visible contemporary railroad line, Carroll Creek south of the railroad, but heavy tree cover obscuring view of all other features.

No standing structures were observed during the survey. This is presumably because the town was razed sometime after it was abandoned in 1928 (Warren 1984). Instead, a scatter of artifacts and architectural features was observed in an approximately 860-meter-long area that extended approximately 100 m north of and 25 m south of the Burlington Northern railroad tracks that bisect the town site. Four architectural features, six concentrations of artifacts (called Debris Scatters), and twelve isolated finds were recorded during the survey. Within Debris Scatter 1, several concentrated areas of artifactual debris, referred to as loci, were recognized. The remaining debris scatters did not have multiple concentrations of artifacts. A sketch map of the site is provided as Figure 28.

Debris Scatters and Artifacts

Among the debris scatters and isolated finds, a total of 556 artifacts were recorded, with a total of 24 artifacts that were diagnostic for time of manufacture. These items demonstrated an age range from as early as the mid-1850s to as late as the 1970s, but most of them date from the 1900s-1930s. The diagnostic artifacts are summarized in Table 2.

The debris scatters ranged from 10 m N/S by 5 m E/W to 40 m N/S by 30 m E/W and had between 46 and 173 artifacts within them. The artifacts included such items as glass bottles (clear, amber, etc.), ceramic flatware, cups and bowls, leather fragments, tin cans, metal construction material, machine parts, pails, and butchered bone. Each of these six artifact scatters are described in detail below.

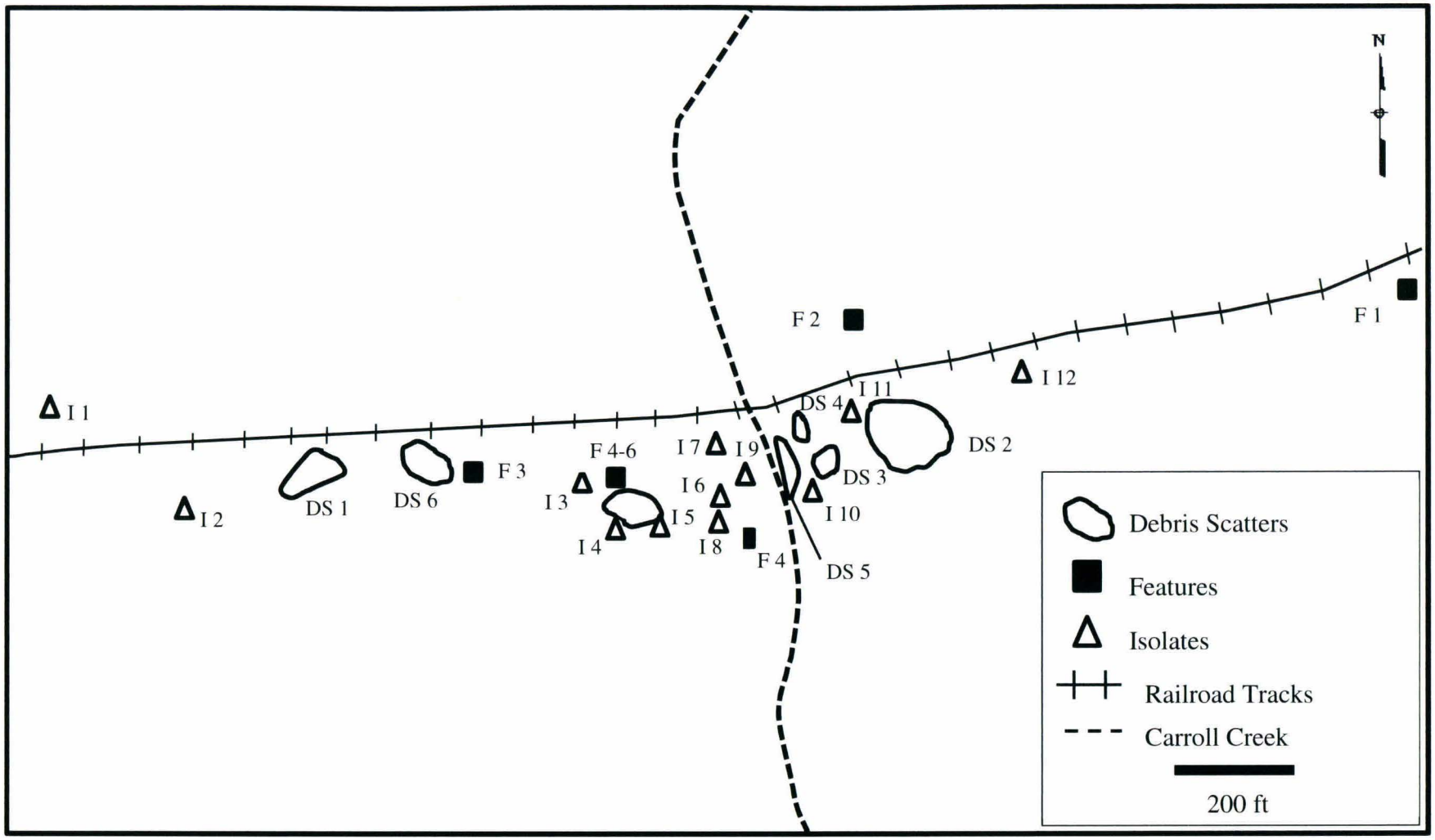


Figure 28. Map of observed cultural materials at Alpine. This map was produced by tracing the GPS data map from Google Earth.

Table 2. Diagnostic Artifacts

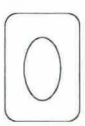
Artifact	Type	Size	Description	Maker's Mark Illustration	Date
DS1-A1 Locus 1	Jar base	3 5/18" diam.	Clear glass with "SCHRAM" "1" "ST. LOUIS" makers mark		1905-1969 (Everett 2013)
DS1-A2 Locus 1	Bottle base	3 1/16" diam.	Clear glass base with IPGCO (Illinois Pacific Glass Co.) maker's mark		1902-1925 (Russell 2013a)
DS1-A3 Locus 1	Bottle fragment	3 ½" tall	Clear glass bottle with" GEBHARDT EAGLE" embossed on one side and "CHILI POWDER" on the other		1896-present (Hartmann 1988)
DS1-A4 Locus 1	Bottle base	2 ½" diam.	Dark amber glass with "A 6" maker's mark		1854-present (Russell 2013a)
DS1-A5 Locus 1	Mason jar (broken)	2 9/16" diam. (lid opening)	Clear glass with "BOYD" embossed on side		1863-1864 (Boyd 2010)
DS1-A6 Locus 1	Mason jar (broken)	2 ¾" diam. (lid opening)	"ATLAS E-Z SEAL"		1800s-1964 (Milner 2004)
DS1-A7 Locus 1	Plate frag		White on white with scalloped edge porcelain plate	 (Ruby Lane 2014)	1877-present (Welch 2013)
DS1-A8 Locus 2	Jar base	6 1/8" diam.	Clear glass jar base with "OWENS BOTTLE COMPANY" maker's mark		1911-1929 (Russell 2013a)
DS1-A9 Locus 2	Bottle	3" diam.	Clear whiskey bottle with collar and finish with "B over M" makers mark	**B M**	

Table 2 (Continued)

Artifact	Type	Size	Description	Maker's Mark Illustration	Date
DS2-A1	China plate fragment	4 ½" x 3 1/8"	Plate is white with a blue pattern on lip of plate. Base of plate has "ALLERTONS, 'ENGLAND", "DON", RFN1428272"	 (Birks 2013)	1903-1912 (Birks 2013)
DS2-A2	China plate fragment		Plate is white with rose panel and blue and yellow band. Base of plate has "DERWOOD", W. S. GEORGE", "188"	**DERWOOD W. S. GEORGE 188**	1910-1970s (Sacksteder 2005)
DS2-A3	China plate fragment		Plate is white with a blue pattern and has "DERBY", "GORGE BROS", 182"	**DERBY GEORGE BROS 182**	Date unavailable
DS2-A4	China plate fragment		Plate is white on white with "RADISON" "W.S. GEORGE" "126A"	**RADISSON W.S. GEORGE 126A**	1910-1970s (Sacksteder 2005)
DS2-A5	Mason lid liner	2 ½" diam.	Opal glass or "porcelain" zinc Mason Jar lid liner. Has "GENUINE BOYD CAP", FOR MASON JARS" engraved in glass		1871-1950s (Russell 2013b)
DS2-A6	Bottle base	3" diam.	Amber bottle base with an "S" inside of a star. (Southern Glass Company)		1916-1931 (Russell 2013a)

Table 2 (Continued)

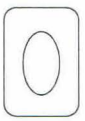
Artifact	Type	Size	Description	Maker's Mark Illustration	Date
DS2-A7	Broken bottle base	2 7/16" x 1 11/16"	Clear glass medicine broken bottle base with "OWENS BOTTLE COMPANY"		1911-1929 (Russell 2013a)
DS2-A8	Bottle base	2" x 1 1/8"	Clear glass medicine bottle base with "L B & S."		
DS2-A9	Whiskey bottle with neck, collar and finish	Neck: 4", collar: 5/16", finish: 3/4", mouth width: 1"	Amber whiskey bottle neck, collar and finish	Bottles with this type of finish (tapered collar with ring) are historically known as a "Straight Brandy", "Wine" or "Whiskey Finish." Bottles with this rectangular mouth-blown finish date from around "1890s to National Prohibition (1920)." (Lindsey 2013a).	1890- 1920 (Lindsey 2013a)
DS2-A10	Whiskey bottle with neck, collar and finish	Neck: 3 ½" long, collar: 1 1/8", finish: 1 1/16" and mouth width: 1 1/8"	Amber whiskey bottle neck, collar and finish. Seems visible on both sides of bottle neck.	Bottles with this type of finish (tapered collar with ring) are historically known as a "Straight Brandy", "Wine" or "Whiskey Finish." Bottles with this rectangular mouth-blown finish date from around "1890s to National Prohibition (1920)." (Lindsey 2013a).	1890- 1920 (Lindsey 2013a)
DS3-A1	Bottle base	2 1/8" diam.	Clear glass bottle base with "HAZEL ATLAS", "179" makers mark		1902-1964 (Russell 2013c)
DS3-A2	Jar fragment	2 ¼" x 2 ¼"	Clear glass fragment with "ASELINE" "MARK," "CHESEBROUGH," "NEW-YORK"		1890-1970 (Russell 2013a)
DS6-A1	Bottle base	3" diam.	Clear glass bottle base with "M" (Maryland Glass Corporation. Baltimore)		1907-1970 (Russell 2013a)

Table 2 (Continued)

Artifact	Type	Size	Description	Maker's Mark Illustration	Date
DS6-A2	Bottle	1 3/16" wide x 2" x 5" tall	Cobalt blue bottle with "BROMO-SELTZER" "EMERSON DRUG CO." "BALTIMORE, MD." Bottle manufactured by Cumberland Glass Company.		1891-1960s (Russell 2013d)
DS6-A3	Bottle		Rectangular clear glass bottle with "THE SINGER MANFG CO." "TRADEMARK"		1863-present (Best 2004)

Debris Scatter 1 measures 15 m N/S by 30 m E/W and is composed of two loci (Locus 1 located on the southern margin and Locus 2, located on the northern margin), with other artifacts more widely distributed within the scatter. The scatter has been disturbed by artifact collectors. A total of 173 artifacts were recorded, of which nine have characteristics that provided age estimates for the scatter. The date range from these artifacts is from the 1850s to present (see Table 2 and examples in Figure 29). Artifacts were concentrated in two loci, with 128 in Locus 1, 16 in Locus 2 and 29 artifacts found outside the two loci.

Locus 1 measures 28' (8.5 m) N/S by 18'8" (5.5 m) E/W. Within Locus 1, someone had stacked porcelain plate and bowl fragments, clear glass and miscellaneous metal debris into the hollow trunk of a tree. There were six diagnostic artifacts found in Locus 1, all glass bottle or jar fragments with maker's marks or embossed lettering dating from the 1850s to 1970. The non-diagnostic artifacts recorded in Locus 1 of Debris Scatter 1 include 48 clear glass fragments, 1 porcelain fragment that measures 10 5/8" wide, 1 whiteware cup fragment, 70 porcelain plate fragments, 2 solid white porcelain lid

fragments, 4 stoneware bowl fragments (two pieces were yellow/brown in color and the other two were white with a blue stripe pattern).

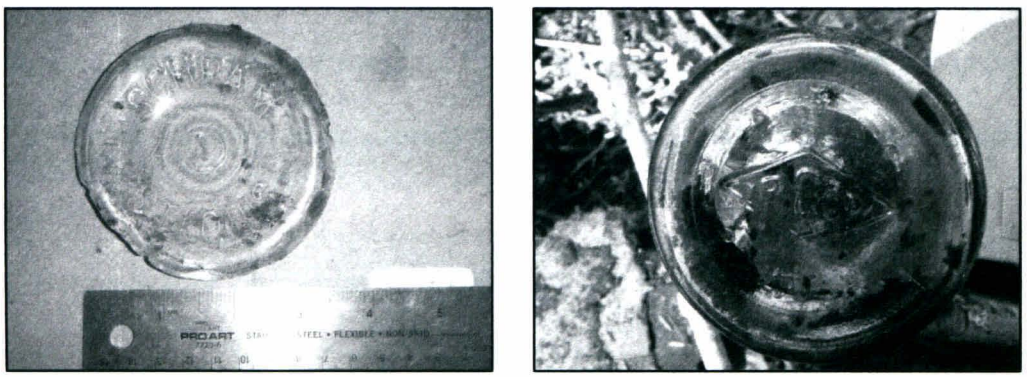


Figure 29. Example diagnostic artifacts from Debris Scatter 1. Left: Schram St. Louis jar base. Right: IPGCO bottle base. The Schram Glass Manufacturing Company began in 1905 and was acquired by the Ball Corporation in 1925 (Wayne 2013). The IPGCO (Illinois Pacific Glass Company) existed from 1902 to1925. Their first factory opened in San Francisco and later opened other factories in southern California, Portland, and Seattle (Russell 2013a).

Locus 2 of Debris Scatter 1 measures 11' (3.4 m) N/S by 16' (4.9 m) E/W. In Locus 2 the artifacts are located under and between downed logs. Many of the artifacts have been exposed by the digging of artifact collectors. One diagnostic artifact was recorded in Locus 2, Artifact DS1-A8, a glass jar dating between 1911 and 1929 (see Table 2). The non-diagnostic artifacts recorded in Locus 2 include one decomposed Log Cabin syrup tin, two tobacco tins, one spice tin measuring 2 5/16" x 1 ½" x 1", one key-wind sardine tin, one condensed evaporated milk can measuring less than 4", one non-measured sanitary can, two smashed galvanized pails, one metal strip, one round piece of tin with nail punched holes around finished edge, two pieces of miscellaneous metal and one piece of leather. The remaining artifacts observed in Debris Scatter 1 not included in the loci include one broken clear glass jar, one piece of banding wire, one metal mold

(possibly a cap to a battery), four porcelain fragments, one piece of stove pipe metal, one deteriorated enamel cooking pot, three pieces of miscellaneous metal, seven smashed cans, one non-measured square can, one sanitary can measuring 2 9/16" x 3 ½", two knife-opened sanitary cans measuring 2 11/16" x 4", one sanitary can measuring 3 5/16" x 2" x 5 ¼", one sanitary can measuring 4" x 4 1/16", and one tin canister measuring 2 1/8" x 2 9/16".

Debris Scatter 2 measures 40 m (131' 2") N/S by 30 m (98' 5") E/W. A total of 135 artifacts were recorded, of which 10 (DS2-A1 through A10) have time-diagnostic traits, which provided age estimates from 1871 to the 1970s (see Table 2, Figure 30). The non-diagnostic artifacts include 27 smashed sanitary cans, 4 non-measured sanitary cans, 1 hole-in-cap measuring 4" x 5", 3 tobacco tin, 1 clear glass extract bottle, 1 aquamarine jar base with a "1" and a line underneath the 1, 60 clear glass fragments, 8 amber glass fragments, 2 dark green glass fragments, 2 milk glass fragments, 2 crystal glass fragments, 2 large pieces of crockery, 1 mint green ceramic pitcher fragment, 1 porcelain fragment, 3 leather shoe fragment, 1 piece of miscellaneous metal, 1 piece of pipe metal, 4 sheets of tin metal roofing, 1 galvanized pail, 1 smashed galvanized tub, 1 iron stove piece, and 1 metal Mason jar lid.

Debris Scatter 3 measures 15 m (98' 5") N/S by 15 m (98' 5") E/W. Of the 108 artifacts recorded in the scatter, only two, DS3-A1 and DS3-A2, had time-diagnostic traits. These provided age estimates between 1890 and 1970 (Table 2). DS3-A1 is a Hazel-Atlas bottle base and DS3-A2 is a clear glass Vaseline jar. The non-diagnostic artifacts recorded in Debris Scatter 3 include 1 broken clear glass jar, 1 piece of

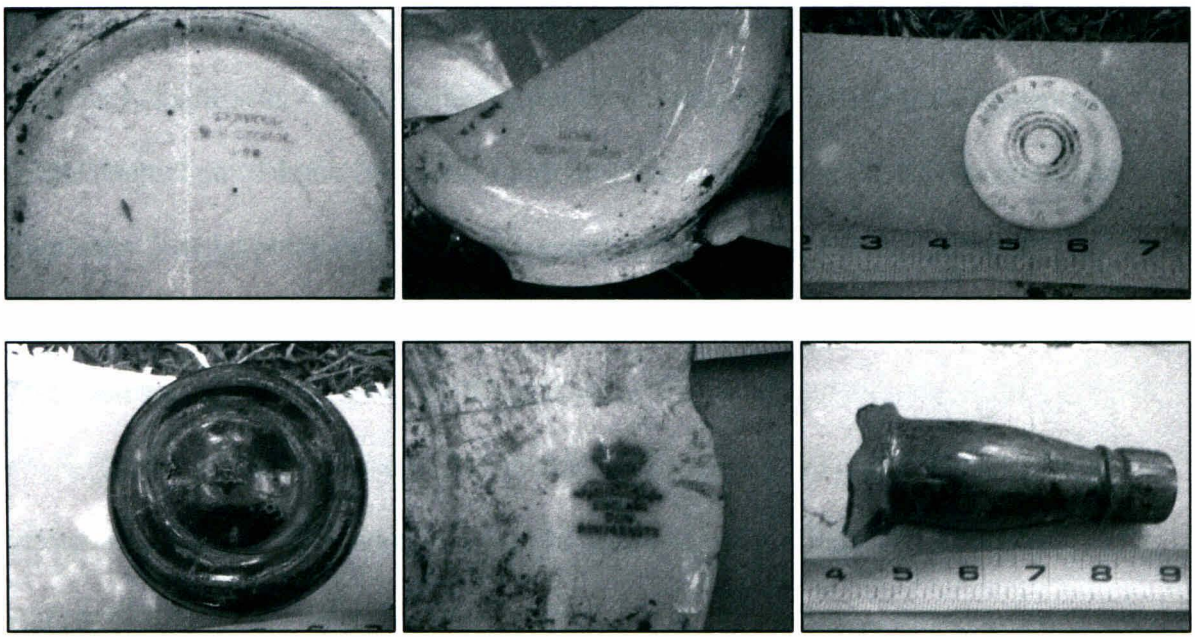


Figure 30. Example diagnostic artifacts from Debris Scatter 2. Top left: W.B George porcelain plate. Top middle: George Bros porcelain plate. Top right: Boyd Mason jar liner. Bottom left: Southern Glass Company amber bottle base. Bottom middle: Allertons porcelain plate. Bottom right: amber "Whiskey Finish" bottle neck, collar and finish.

butchered bone, 2 leather gloves (one complete the other in poor condition), 52 clear glass fragments, 25 whiteware fragments, 1 Mason jar lid, 12 miscellaneous metal pieces, 1 metal banding strip, 1 smashed galvanized tub, 1 crystal glass fragment, 1 porcelain plate (white with an opal sheen and grayish color pattern), several pieces of burned stone and melted glass, 3 galvanized pails, several clear glass window shards, 1 clear glass fragment with "AS," "OULDER," "N," 1 clear glass milk bottle fragment measuring 2 ½" in diameter, 1 clear glass broken jar (lid measures 2 5/8" and is threaded), 1 small leather shoe, and 1 broken amber bottle measuring 2 ½" diameter and has "2" embossed on its base.

Debris Scatter 4 measures 10 m (32' 9") N/S by 5 m (16' 4") E/W. No diagnostic artifacts were identified. Non-diagnostic artifacts consist of 1 tobacco can, 9 clear glass fragments, 1 spice tin, 4 aquamarine Mason jar fragments, 1 amber glass fragment, 1 partial enamel pot, 1 brick fragment, 1 hole-in-top sanitary can, 30 miscellaneous metal fragments, 1 metal pot handle, 1 ice pick-punched hole-in-cap can measuring 3" x 4 11/16", 1 knife-cut hole-in-cap measuring 4 5/8" tall, 1 hole-in-cap can measuring 3" x 4 7/16" and 1 spice tin measuring 1 3/8" x 2 3/8" x 3 ¼".

Debris Scatter 5 measures 32 m (104' 11") N/S by 15 m (49' 2") E/W, and is located in a north/south trending channel 43' east of Carroll Creek. The scatter is composed mostly of widely dispersed artifacts, but there is a single concentration at the southern end. Artifacts were located on the hillside, at the base of the hill and next to the creek. The top of the hill was surveyed for a source of the scatter, but nothing was observed. It is difficult to determine if the artifacts were thrown from the top of the hill or if they traveled from upstream during floods. No diagnostic artifacts were recorded. The non-diagnostic artifacts include: one piece of stove pipe, eleven clear glass fragment, seven amber glass fragments, one leather shoe fragment, one piece of iron frame, one piece of tin metal sheeting, one complete clear glass jar with metal lid still attached measuring 2" x 3", one amber bottle base, one crown top amber beer bottle, one partial clear glass milk bottle, one clear glass bottle, one clear glass whiskey bottle with neck, collar and finish, one clear glass bottle measuring 2 ¼" diameter x 6 ¾" tall, three whiteware fragments, one metal stove fragment, one piece of clear textured glass, five

pieces of miscellaneous metal and three sanitary cans. There was recent disturbance at the north end, based on the presence of a modern hearth and two plastic bottles.

Debris Scatter 6 measures 15 m (49' 2") N/S by 23 m (75' 5") E/W and consists of small debris scatter with one small concentration. A small concentration totaling six broken bottles was located in a small unnamed creek, with the remaining artifacts dispersed around this area. Of the artifacts recorded in the scatter, three, DS6-A1 through DS6-A3, provide age estimates between 1853 and 1970 (see Table 2, Figure 31). The non-diagnostic artifacts recorded include one porcelain fragment, one galvanized bucket, one piece of iron, one large piece of scrap metal, and seven pieces of white-on-white crockery with a blue stripe pattern, and the six previously mentioned bottles.

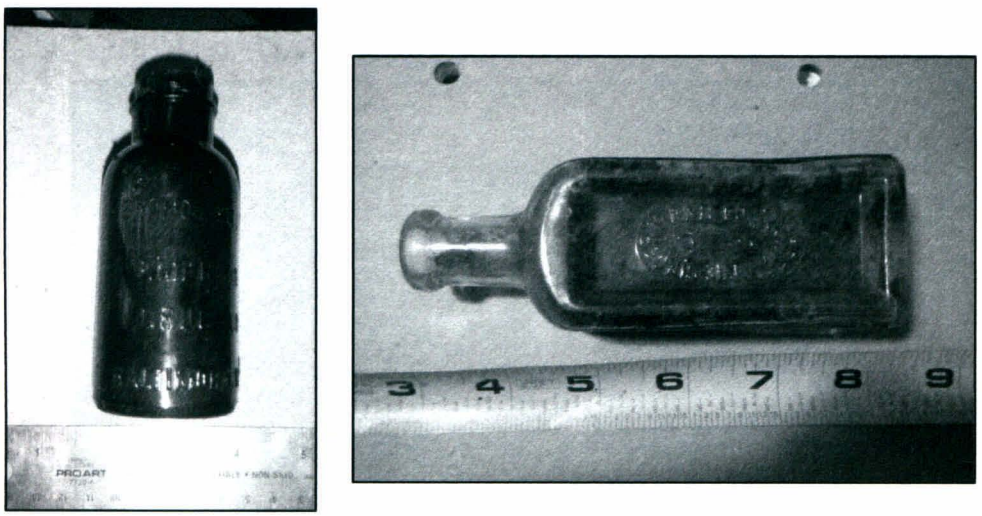


Figure 31. Example diagnostic artifacts from Debris Scatter 6. Left: Cobalt blue Bromo Seltzer bottle. Right: Singer clear glass sewing oil bottle.

A total of twelve isolated finds were recorded during the survey. Each was three or less artifacts in an area less than 5 m in diameter. Isolate 1 consists of two bottles found lying together. The first is a dark amber crown top beer bottle measuring 2 7/16"

diameter by 9 1/2 "tall with a finish measuring 5/8" in length by 1" wide. Seams can be seen on both sides of the bottle and at the base of the collar, suggesting the top was added separately. There is "36" embossed on the base of the bottle. The second bottle is a light amber flask style bottle. Its base measures 3 ½" by 1 1/16" and it is 8 5/16" tall. The base has "H-1," 16LW" "73" "D9" "BALL" and "47" embossed on it (Figure 32). Located at the shoulder below the collar the bottle is embossed with "FEDERAL LAW FORBIDS SALE" and at base of bottle "ONE PINT 1". The opposite side of the bottle has 'OR REUSE OF THIS BOTTLE" and at base "ONE PINT". The "Federal Law" statement began appearing on bottles in 1935 and persisted until the 1960s (Lindsey 2013b). The stylized script used by Ball Glass Company on this particular bottle dates between 1933-1960 (Loe 2012).

Figure 32. Amber flask bottle base from Isolate 1.

Isolate 2 is one can, one brick and one metal bolt. Isolate 3 is an amber bottle base. Isolate 4 is a wrought iron bedframe. Isolate 5 is a square concrete block with

hollow center. Isolate 6 is two complete bricks. Isolate 7 consists of one clear glass "Kerr" Mason jar, one clear glass bottle base with Owens Bottle Co. maker's mark and one metal tea kettle. The maker's mark and Mason jar are shown in Figure 33. Kerr Mason jars began being manufactured in 1904 (Milner 2004) and are still being manufactured today. The Owens Bottle Company bottle base has the Box-O mark (O inside of a square). There are inconsistencies on the first manufacturing date and it could be 1915 or 1919 (Lockhart et al. 2010). The Owens Bottle Co. continued to use this mark until it merged with the Illinois Glass Co. in 1929 (Lockhart et al. 2010).

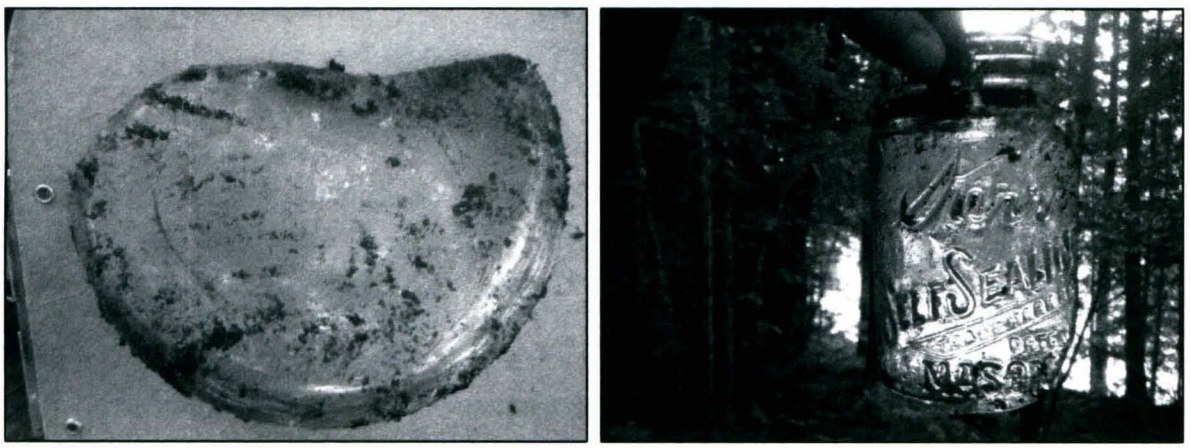


Figure 33. Artifacts from Isolate 2. Left: Owens Bottle Company bottle base. Right: Kerr Self-Sealing Mason jar.

Isolate 8 is a galvanized tub. Isolate 9 is a piece of clay pipe, one enamel pot and one piece of sheet metal (These items were located on an old trail and appear to have been placed there recently). Isolate 10 is two galvanized pails (one pail is in descent condition and the other is highly deteriorated). Isolate 11 is a galvanized tin pail and Isolate 12 is also a galvanized tin pail.

Features

The Alpine site also has seven features, all separated from the debris scatters. The features range from a small isolated laid brick feature to a set of three foundations called the "school area" on the south side of the tracks. Each feature is summarized in Table 3 and described in detail below.

Table 3: List of Features

Feature #	Description	Dimensions
F1	Water tower structure	12 m (40') N/S by 11 m (36') E/W
F2	Sawmill foundation	12.3 m (40') N/S by 15.02 (49') E/W
F3	Square rock, concrete and brick foundation	2'8" (0.8 m) wide by 5'11" (1.8 m) long by 25 ½" (7.8 m)
F4	Laid brick floor	0.37 m (1' 2") N/S by 0.54 m (1' 9") E/W.
F5	School foundation segment	12' 10" (4 m) by 10' (3.0 m)
F6	School foundation segment	18' 9" (5.7 m) by 10' (3.0 m)
F7	School foundation segment	13'(4.0 m) by 12' (3.7 m)

Feature 1 is a water tower structure that measures 12 m (40') N/S by 11 m (36') E/W and consists of eight concrete columns surrounding a square foundation (Figure 34 and 35). Feature 1 is located 10 m up an 18% slope from the railroad tracks. The structure was built into the hillside, so the columns on the downhill (north) side are taller than the south side in order to provide a horizontal, level base for the water tank, which is now missing. Due to the amount of duff that has accumulated around the feature, the height of the walls and columns cannot be determined. However, the height of the concrete columns and foundation on the downhill side are at least 8' 1.5" (2.5 m) based on what could be measured. The columns taper from about 32" (0.8 m) at the base to 19"

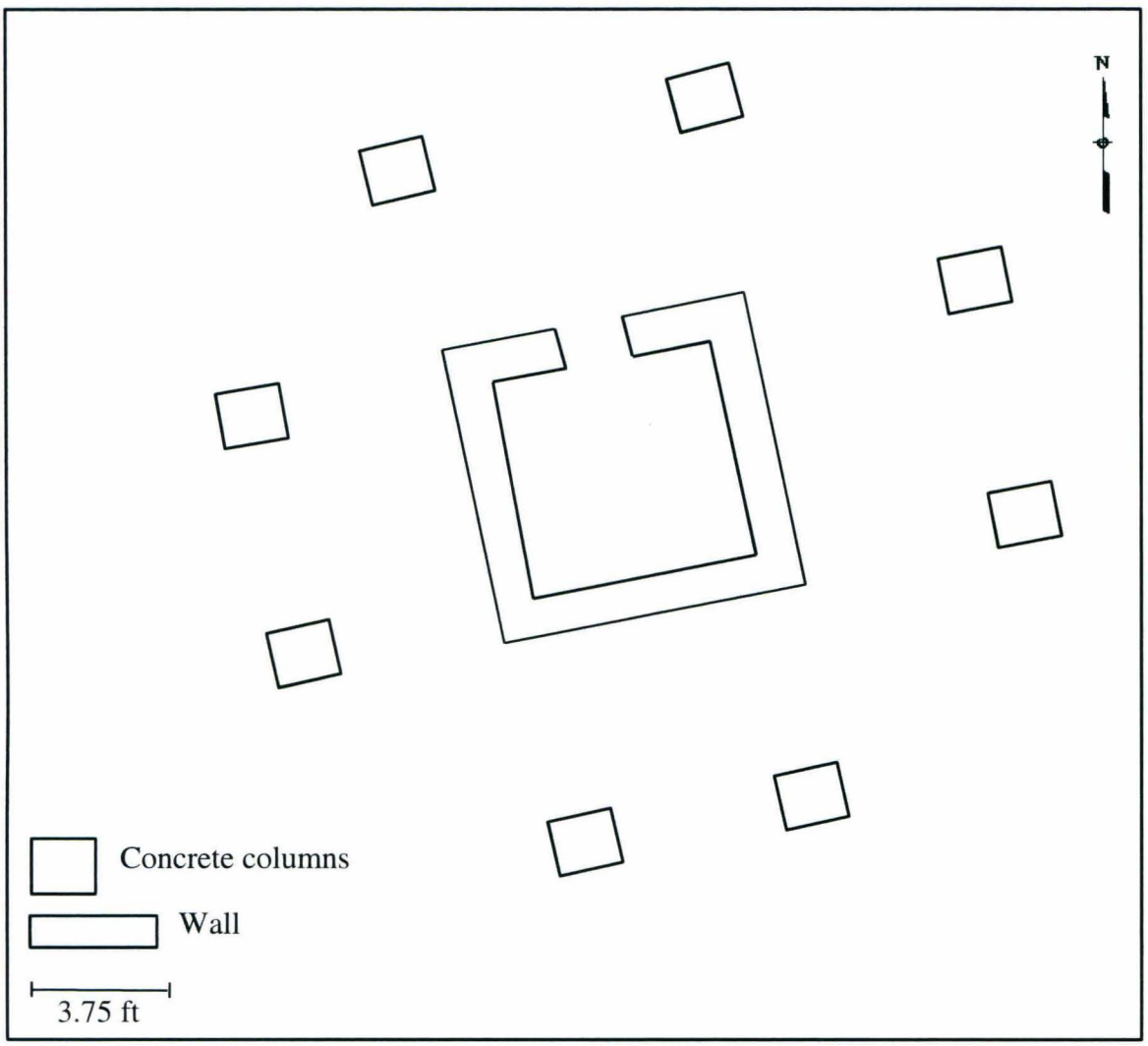


Figure 34. Plan map of Feature 1.

(0.5 m) at the top. All eight of the columns have a ½" high raised square section in the center measuring 16" x 16" (0.4 m x 0.4 m). The center square foundation consists of four concrete walls with the north wall measuring 6'9" (2.1 m) tall and the south wall measuring 3' (0.08 m). The walls taper from up to 33' 5" (10.2 m) at the base to 2' 5"' wide at the top. There is an opening that measures 56.5" (1.4 m) x 17" (0.4 m) wide x 56.5" (1.4 m) in the north wall facing downhill. Inside the structure located at the base of

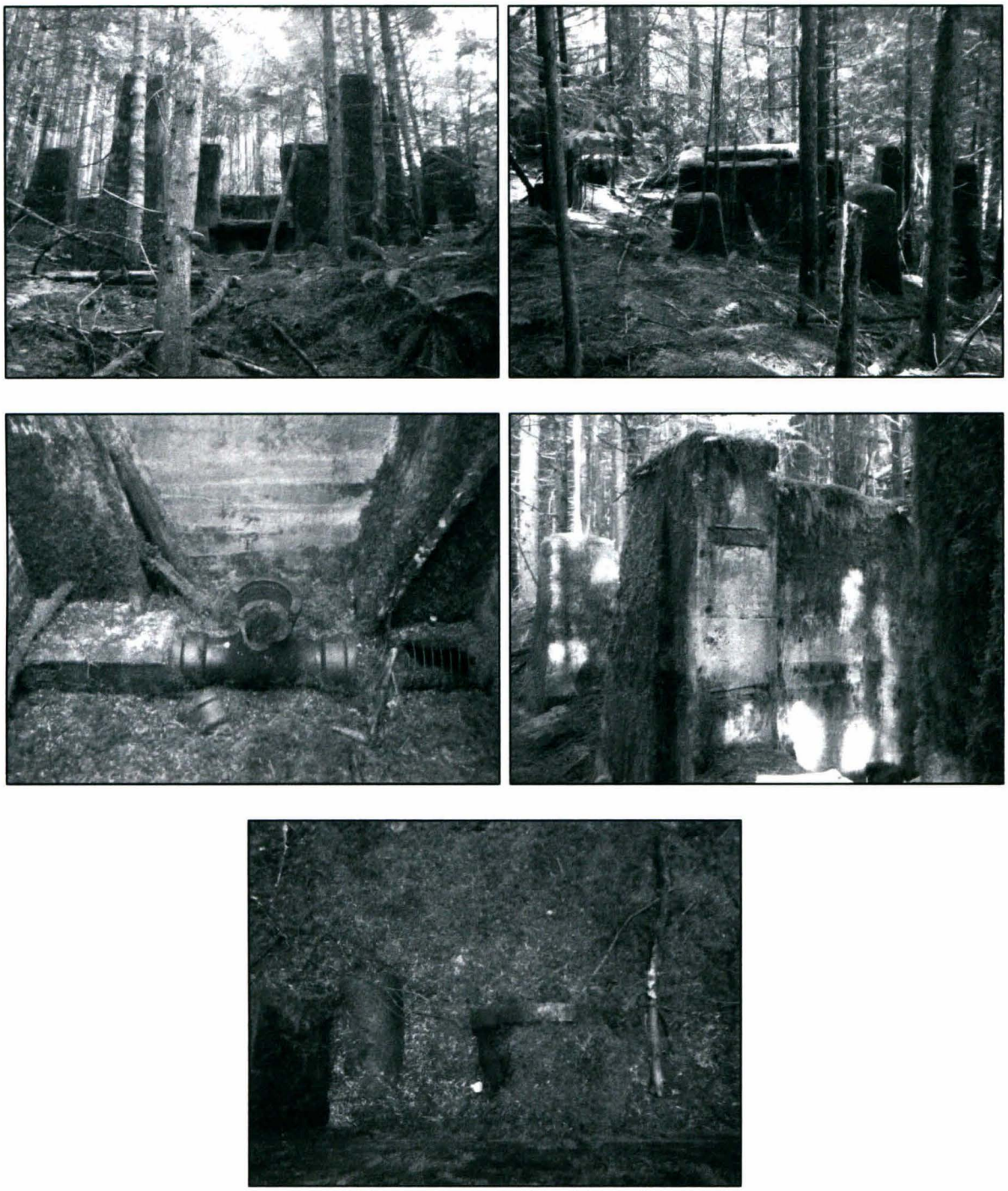


Figure 35. Four views of Feature 1 (watertower foundation). Top left:overview of watertower looking south. Top right: overview of watertower looking west. Bottom left: valve remnants located within the watertower structure on south wall. Botom right: overview of the slats in the north wall of water tower structure. Bottom center: overview of valve remnants located in the water tower structure on the ground adjacent to the north wall.

the south wall is a square concrete pipe measuring 24 ½" (0.6 m) long x 12" (0.3m) at east end and 10" (0.3 m) at west end. A three-way valve is connected to the concrete pipe (see Figure 35). Inside the structure on the north wall are two protruding steel pipes, one with threading. Feature 1 is almost certainly a water tank foundation and is discussed in further detail in Chapter V.

Feature 2 is a sawmill foundation. The sawmill measures 12.3 m (40') N/S by 15.02 m (49') E/W. The foundation was laid generally east/west to parallel the railroad tracks. The only visible remains left of the sawmill are the north foundation wall, two machinery footers, one "L" shaped concrete block located on the south side, one concrete block located at the east end, one small concrete block with a 2" pipe located in the center of the block in the southeast corner (Figure 36) and one 2" pipe located west of the concrete footers. By comparison with the 1926 Sanborn Fire Insurance map, this pipe was a fire hydrant.

The feature is surrounded by tall, thick vegetation and trees. Much of the foundation had been filled in by forest duff. The construction of the sawmill began in 1907 and was completed in 1910 (Boreson 1992). In 1913, 1914, and 1917, the saw mill caught fire, burning to the ground each time (Boreson 1992). The sawmill was rebuilt after each fire, and was finally closed in 1928 (Roe 1995).

Due to its location (it is the first feature encountered when entering the property from the access road), the area around Feature 2 is highly disturbed. There are a variety of artifacts such as bricks, brick fragments, miscellaneous metal and iron bolts. These items have been taken out of their context and have been placed atop the north foundation

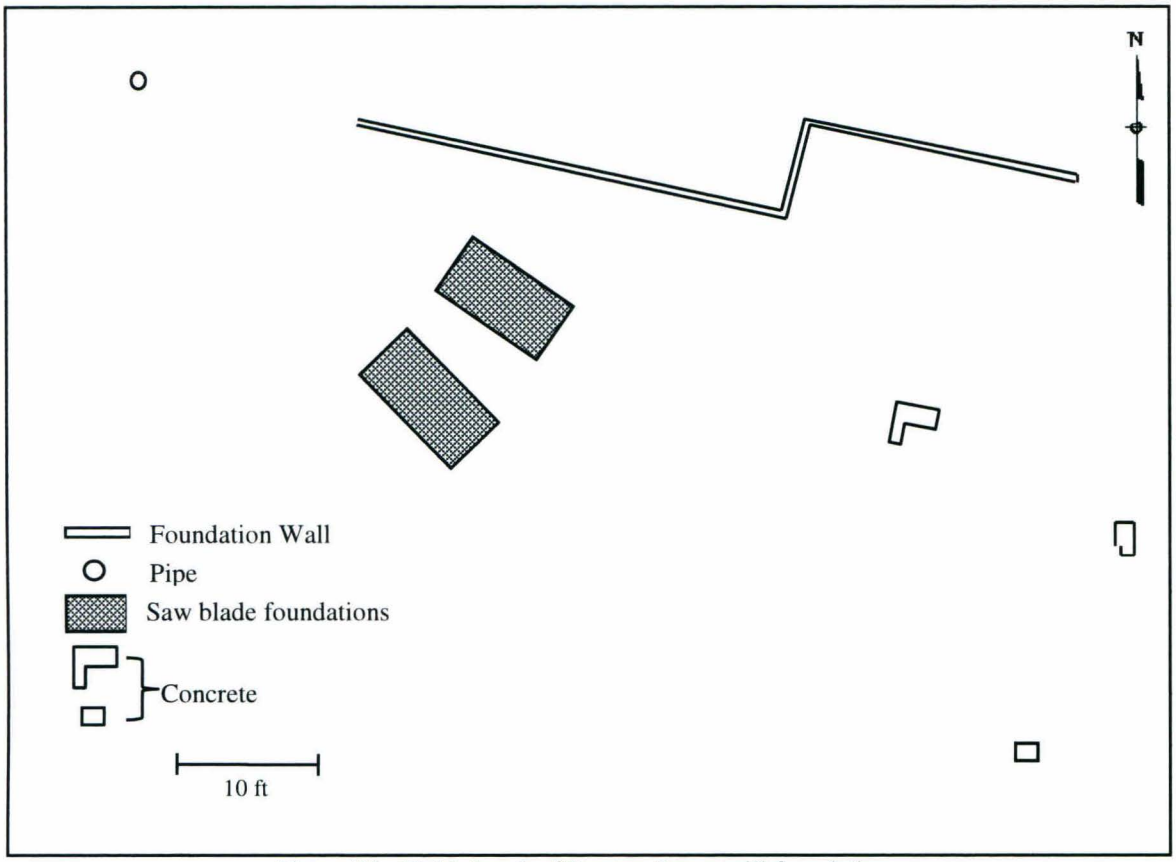


Figure 36. Field sketch of Feature 2, sawmill foundation.

wall. There is also a visible dirt push pile to the west of the feature that contains numerous bricks and brick fragments. A surface count estimated 20 bricks or brick fragments, many of them are stamped (see Figure 37). One of the bricks is stamped with "LIVERMORE." Livermore Fire Brick Co. was based out of Livermore California; the brick observed is considered a "red pressed brick" and was manufactured from 1915 to 1917 (Moiser 2007). Also within the area was a former squatter's camp and/or methamphetamine laboratory.

Feature 3 is a square rock, concrete and brick foundation that measures 2'8" (0.8 m) wide by 5'11" (1.8 m) long by 25 ½" (7.8 m) high above the forest duff. The feature

Figure 37. Six views of Feature 2. Top left: overview of north wall. Top right: concrete supports for some heabvy equipment, presumably the saw itself. Middle left: overview of northeast end of sawmill. Middle right: overview looking east. Bottom left: vertical pipe located at west end of sawmill. Bottom right: small example of stamped bricks located in push pile at west end of sawmill.

is built of rocks and covered with concrete (Figure 38). There are eight complete bricks and six brick fragments located on the top of the foundation. The complete bricks measure 8 3/16" (0.207963 m) x 4 1/16" (0.103188 m) x 2" (0.0508 m) and 2 7/8" (0.073025 m) thick. The feature could be part of a foundation for an outbuilding or house. The age of this feature could be from ca. 1910, when the mill began operation, to 1928 when the mill closed and the town was abandoned. To the east and directly next to the foundation is a large pile of bricks in an area measuring 5' x 6' (1.5 m x 1.8 m). There are three bricks laying in a pile 5 m (1.5') to the north and a galvanized washtub 7 m (22' 11") to the south.

Figure 38. Two views of Feature 3. Left: overview of rock/concrete foundation. Right: close up of rock/concrete foundation.

Feature 4 consists of a laid brick floor (Figure 39). The area measures 0.37 m (1' 2") N/S by 0.54 m (1' 9") E/W. It is made up seven rows of brick, each row containing 14-20 standard size bricks and 1-2 larger bricks, laid east to west. The majority of the floor is made up of standard size bricks that measure 9 1/2" (2.9 m) long by 2 ¾" (0.06985 m) wide and are laid on their side, with visible mortar. To the west and the

north sides of the floor there are larger bricks that measure 1' 3/8" (0.4 m) long by 8 9/16" (0.217488 m) wide. There are a total of five large bricks within the laid floor. Approximately four feet (1.2 m) to the south are four large bricks and brick fragments on the surface, and more bricks extending into the dirt of the hillside. To the east of the brick floor, two metal pipes, both 2" in diameter, were recorded. No diagnostic historic artifacts were recorded. Non-diagnostic artifacts included stove pipe metal, milled wood, one metal drum measuring 1' 10" long by 10 ½ wide, one clear glass bottle base measuring 2 5/16" diameter with no maker's mark and a deteriorated galvanized bucket.

Figure 39. Two views of Feature 4. Left: closeup view of laid bricks with tarp in place.Right: view of bricks with tarp rolled back.

In addition to the historic materials associated with Feature 4, there is modern garbage. Located approximately 10' south of the laid brick feature (F4) there are remnants of a recent squatter's camp/methamphetamine lab. I was informed by Bob Kelly of the Skykomish Historical Society that there had been meth labs located within

the project boundary. This is one of two such lab remains that I found during the survey (the other was described with the sawmill above).

Features 5, 6, and 7 are three building remnants (see Figures 40 and 41). I was told that these were the remnants of the town school by Tim Raetzloff, a local avocational historian. The area encompassing all three features measures 25 m E/W (85') by 11 m N/S (35'). Feature 5 measures 12' 10" (4 m) by 10' (3.0 m) and consists of a 5" (0.127 m) wide wall at least 4' 5" (1.3 m) tall where it is visible at the northwest corner. The south and east walls have been filled in by vegetation and duff. The walls are built of brick and overlaid with concrete. Feature 6 measures 18' 9" (5.7 m) by 10' (3.0 m) and consists of a 5" (0.127 m) wide wall at least 18' 9" (5.7 m) tall where it is visible at the southeast corner. The north, south and east walls are visible. There is no west wall and no visible foundation on the surface. The walls are made of laid brick encased in concrete. Feature 7 measures 13'(4.0 m) by 12' (3.7 m) and consists of a 5" (0.127 m) wide wall at least 3'6" (1.1 m) tall at the northwest. All four walls are visible but are deteriorating. Vegetation has grown around and in the foundation, causing the concrete to break apart.

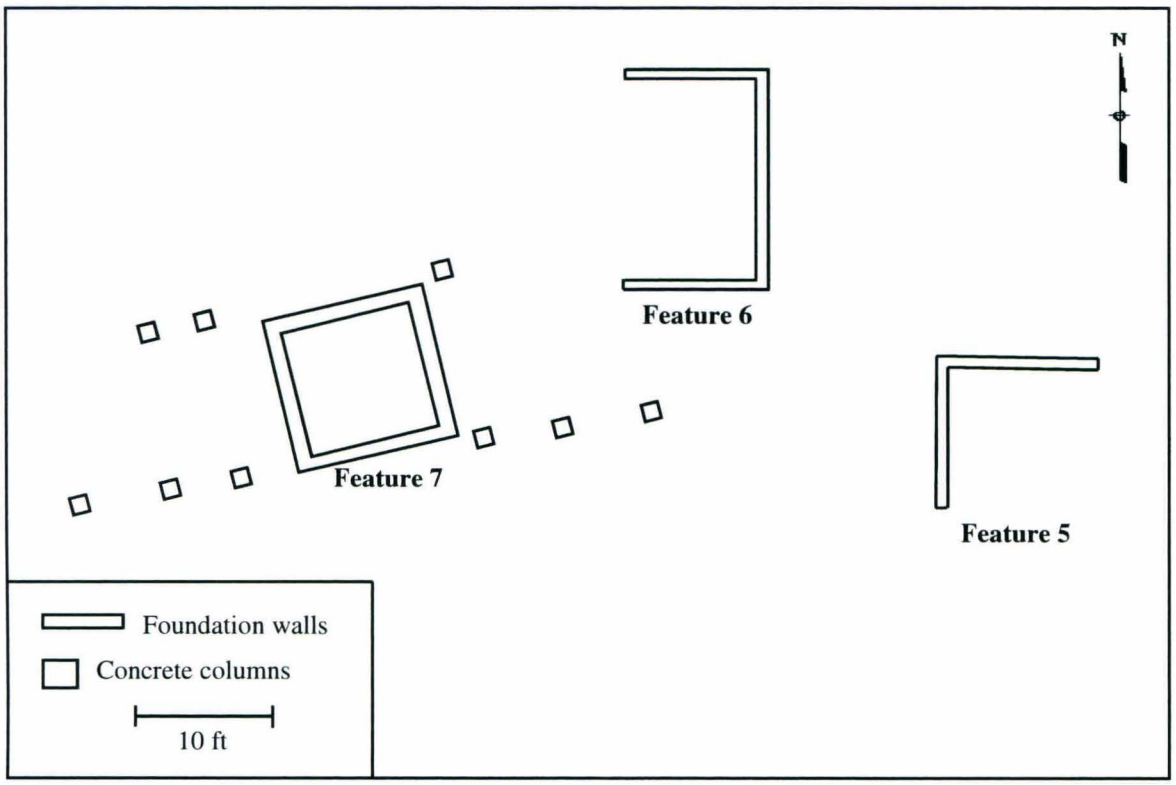


Figure 40. Field sketch plan map of school foundation remnants.

Figure 41. Six overview photographs of Feature 5-7. Top left: Overview looking northwest of Feature 5. Top right: overview looking southeast of northwest corner of Feature 5. Middle left: overview of Feature 6. Middle right: overview of north wall of Feature 7. Bottom left: Overview of Feature 7, looking east into the interior of the building. Bottom right: overview of concrete columns and northwest corner of Feature 7.

CHAPTER V

ALPINE

Alpine Song

In the mountains of the West, in a Valley near the crest lies a gem of fair re-nown.

Tis the men and money every need little Alpine town.

Hail, Hail, Hail, to Alpine high and free!

Hail, Hail, Hail, to the fir, the cedar tree.

Hail, Hail, Hail to the council strong and true.

Hail, Hail, Hail, to the Red the White, the Blue!

[Nippon Lumber Company 1918]

History of the Town and Lumber Company

There is some uncertainty in the literature about the origins of the town of Alpine. According to Roe (1995), it was believed that the area was a Japanese work camp during the construction of the Great Northern rail line in 1892-93. I was unable to find any confirmation of that idea, but it is likely that it was a work camp at that time. It is certain that the Nippon Lumber Company built at this location in 1910 (Daheim 1974; Roe 1995).

The Nippon Lumber Company was organized in 1907 by George W. Fairchild, W.O. Clemans and C. L. Clemans, with the intention to build a sawmill at the Alpine location that could produce 10,000 board-feet daily (Nippon Lumber Company 1918). In

1909, as no construction had been started, the Clemans brothers bought out Fairchild and began building a mill, which was completed in the spring of 1910 (Nippon Lumber Company 1918). A town was established around the mill. According to Warren (1984) as the need for workers increased, the Clemans built additional housing and a second camp was also established a mile below the town where the single men stayed. By the time a photograph was taken ca. 1911 (Figure 42), the town had at least a depot, two sets of tracks, several buildings, power or telegraph lines, and a water tower.

Figure 42. Photograph of depot at Alpine ca. 1911 (University of Washington Digital Collection 2013f).

The Nippon Lumber mill exceeded the owner's expectations, producing an "average daily cut of about"30,000 board feet" (Roe 1995:75) with their chief business of producing 12 x 12s for GNR snowsheds (Roe 1995:75). By 1925, the company name had been changed to Alpine Lumber Company, based on a 1925 Thanksgiving Festival pamphlet (Alpine Lumber Company 1925). As of 1926, the Alpine Lumber operation in

Alpine consisted of two lumber sheds, a log way, a saw mill, a planing mill, filing room, winch house, fuel bin, shipping shed, planer, two platforms, planked drive, shingle mill, several outbuildings, and two loading spur lines (Sanborn Map Company 1926). The same map notes that the saw mill had a capacity of 60,000' in eight hours, and was powered by steam generated from lumber waste fuel and water obtained from an intake in Rocky Creek 1000' from the mill. Several views of the lumber operations are provided as Figure 43-46.

Figure 43. Nippon Lumber Co. lumberyard near GNR tracks ca. 1913 (University of Washington Digital Collections 2013g).

The Nippon Lumber sawmill caught on fire several times throughout its existence, the first occurring in 1913, and again in 1914 and 1917 (Boreson 1992). The fires completely destroyed the mill, which was rebuilt three times. After the second fire, automatic sprinklers were installed helping reduce fire and insurance (Roe 1995).

Figure 44. Alpine Lumber Company ca. 1918 (University of Washington Digital Collections 2013h).

Figure 45. Alpine Lumber Company ca. 1925 (University of Washington Digital Collection 2013i).

Please note: Images on this page have been redacted due to copyright concerns. They can be viewed here:
Figure 44: https://digitalcollections.lib.washington.edu/digital/collection/pickett/id/225/rec/5
Figure 45: https://digitalcollections.lib.washington.edu/digital/collection/pickett/id/182/rec/1

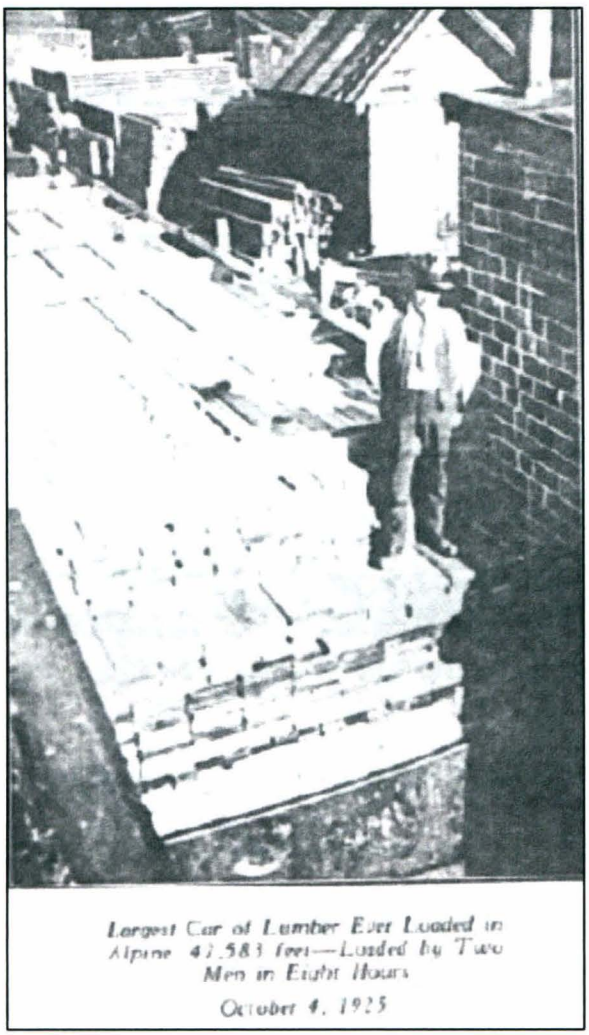


Figure 46. Largest car load of lumber loaded from the Alpine Lumber Company (Alpine Lumber Company 1925:19).

Alpine boasted a population of 200, but only during the summer months, as soon as the snow fell, the population dwindled as single men headed to other areas in search for work (Warren 1984). Unfortunately, United States Census data appears to have been collected for counties rather than individual towns in this period, so no exact population estimates are available. Based on a 1927 Great Northern Railway engineering blueprint

map, there were about 23 houses in the town at that time. The majority of the houses on the steep hillside above the railroad were linked with a wooden walkway (Figure 47).

Figure 47. Overview of houses on south side of tracks and GNR train ca. 1915-1920 (Raetzloff 2012).

By 1928 much of the timber had been logged off (Roe 1995). The Security Timber Company bought the Alpine Lumber mill the same year and expanded their operations (Roe 1995). It is unknown when the Security Timber Company ceased its operations. According to Carlson (2003) the town of Alpine was razed in 1929. The United States Forest Service deliberately burned down the existing buildings to prevent squatters and potential fires (Roe 1995). According to the 1926 Sanborn Fire Insurance map, the mill was "not in operation July 1930, to be dismantled and torn down."

Life in Alpine

Life in the isolated mountain town of Alpine was not without its struggles. Alpine was in the truest sense a company town. The Clemans owned everything but the "depot and the dance hall" (Roe 1995:76). "Rent, heat, and water were free" (Roe 1995:75).

There was no road into the town; the only way in and out was by train. "There was snow on the ground— sometimes 15 feet deep—for almost half the year" (Daheim 1974:3). A 1915 postcard gives a good impression of this aspect of the town (Figure 48). There was electricity but only for lighting, there was no plumbing, "running water came into the house through a trough on the back porch" (Daheim 1974:5) and there was one store that was known for offering liberal credit.

Figure 48. Postcard of Alpine from 1915 (Raetzloff 2012).

According to Daheim (1974) the locals kept busy by neighboring back and forth, hauling firewood from the mill on a nightly basis, playing cards and enjoying food. There was even a class distinction amongst the locals, those who carried their wood from the mill uphill had a harder job than those who carried it downhill or away from the mill, and thus those who hauled their wood uphill were harder workers. The town was even further divided by the Great Northern tracks and there "was quite literally a status to living on the right side of the tracks" (Daheim 1974:3). The area to the south (uphill) contained mostly families and to the north (downhill) consisted mostly of single men.

Due to the towns' isolation and rocky landscape "virtually no livestock was raised...local fruits and vegetables were scarce except for wild blackberries and huckleberries" (Daheim 1974:5). The general store carried some staples, but meat was ordered from Everett and delivered by train.

Although the town does not appear to have had a church, it did have a school. It was one of three of the "country's company towns that had schools with twelve grades" (Carlson 2003:60). There was also a community building north of the tracks called "Liberty Hall" or "Alpine Council Victory Hall." A two story building completed in 1918, the second floor was one large room "to serve as an assembly room and entertainment hall" (Nippon Lumber Company 1918). In 1918, it served as a venue for a play, dance, Red Cross bazar, and children's pageant. The outfitting of the building was described in a contemporary pamphlet:

> The Assembly Room is equipped with stage, player piano and phonograph. This room is decorated with Old Glory, our service flag of thirty-one stars, our Third Liberty Loan honor flag bearing 20 stars, and our Fourth Liberty Loan honor flag bearing one star, as well as various war posters. The lower floor is equipped with stove and cooking utensils in the kitchen, four sewing machines in the Red Cross room and three pool tables, two solo tables, a writing desk and a soft drinks emporium in the pool and reading room. In this room there is at least a supply of stationary, the daily papers and various magazines [Nippon Lumber Company 1918].

Due to its isolation, there was a lack of entertainment. To fill this void the Alpine Dramatic Club would present plays and on holidays such as the 4th of July, the "railroad track became a parade ground, the mill's loading dock a focal point for the brandishing of the first-prize American flag. Sports, competitions, and speeches rounded out the afternoon, with a dance at the combination ballroom and pool hall in the evening" (Daheim 1974:5). The Nippon Lumber Company and Alpine Lumber Company also sponsored annual banquets (see Figure 49) and company picnics.

Figure 49. Annual banquet at Alpine December 5, 1925 (University of Washington Digital Collections 2013j).

Based on a banquet program (Nippon Lumber Company 1918), in 1918 the Council of Patriotic Services and the Alpine Auxiliary of the American Red Cross were organized. Both organizations were to assist in the war effort for World War I. The work accomplished for the year by the women of the Auxiliary included the following

made and sent to the Seattle Chapter: 116 pairs of knitted socks, 1 knitted sweater, 8 pairs of knitted wristlets, 2 ambulance pillows, 36 pairs of bed socks, 50 operating caps, and 40 refugee waists. They also collected 300 pounds of used clothing for "Belgian relief." A total of $1,258.93 was collected by the Auxiliary for the year, of which $967.22 was sent to the Seattle Chapter. The receipts were from memberships as well as several fundraising events like dances, suppers, and a bazaar. The Red Cross Bazar was able to raise $784.64 by selling handmade items such as aprons, candy, flowers, fruit, ice cream, lunches.

Another aspect of the social life of Alpine also was the Chautauqua traveling lecture. Founded in 1847, Chautauqua was originally set up as a training program for Sunday school teachers but began expanding into other areas (Canning 2000). Chautauqua assemblies began to spring up due to popularity with the goal of offering "challenging informational and inspirational stimulation to rural and small-town Americans" (Canning 2000:1). These independent assemblies were usually separated by large distances and were competed for by professional performers. To solve this issue the Lyceum Bureau decided to organize a series of touring Chautauquas where performers were assigned to specific dates during the tour. The performing arts portion of the lecture was not the backbone of the tour; it was the lectures that people were most interested in. Topics of lectures ranged from the current events to comic-storytelling, human interest and travel (Canning 2000). There was also a music portion to the lecture in which the lecture featured a variety of music styles from all over.

The 1918 Chautauqua in Alpine was given by the Radcliffe Booster Club of Washington, D.C., and described in the annual banquet program for that year (Nippon Lumber Company 1918). The theme was "Wake Up, America" and the event ran from August 2 through August 5. There were lectures and sermons by Colonel G. A. Gearhart and Dr. William E. Adams, music by the David Duggin Concert Company, as well as food demonstrations, first aid demonstrations, and a children's pageant.

Alpine Maps and Structures

As of January 5, 1927, when the most complete blueprint was drafted (Figures 50-51), the town consisted of at least 47 houses and larger buildings, plus small outbuildings, two main rail lines, one spur line, and other features. Among the readable features on the map are houses, shacks, Liberty Hall, a school, a mill, a shingle mill, a woodshed, a chicken house, Nippon Lumber Co., new depot, old depot, platforms, pipes, bridges, Alpine Lumber Co., and other unreadable company names. One of the structures to the west out of town is labeled "Jap House." Figures 50 and 51 are halves of an altered base blueprint map surveyed in November, 1918 and originally completed in December, 1918, with "Jan. 5 1927" handwritten on the legend. It is a 1"= 100' blueprint completed by the Great Northern Railway "Office of Principal Assistant Engineer" out of Seattle, Washington. The unaltered 1918 map could not be located, but another alteration of the same map and attributed to 1922 was also located (not provided).

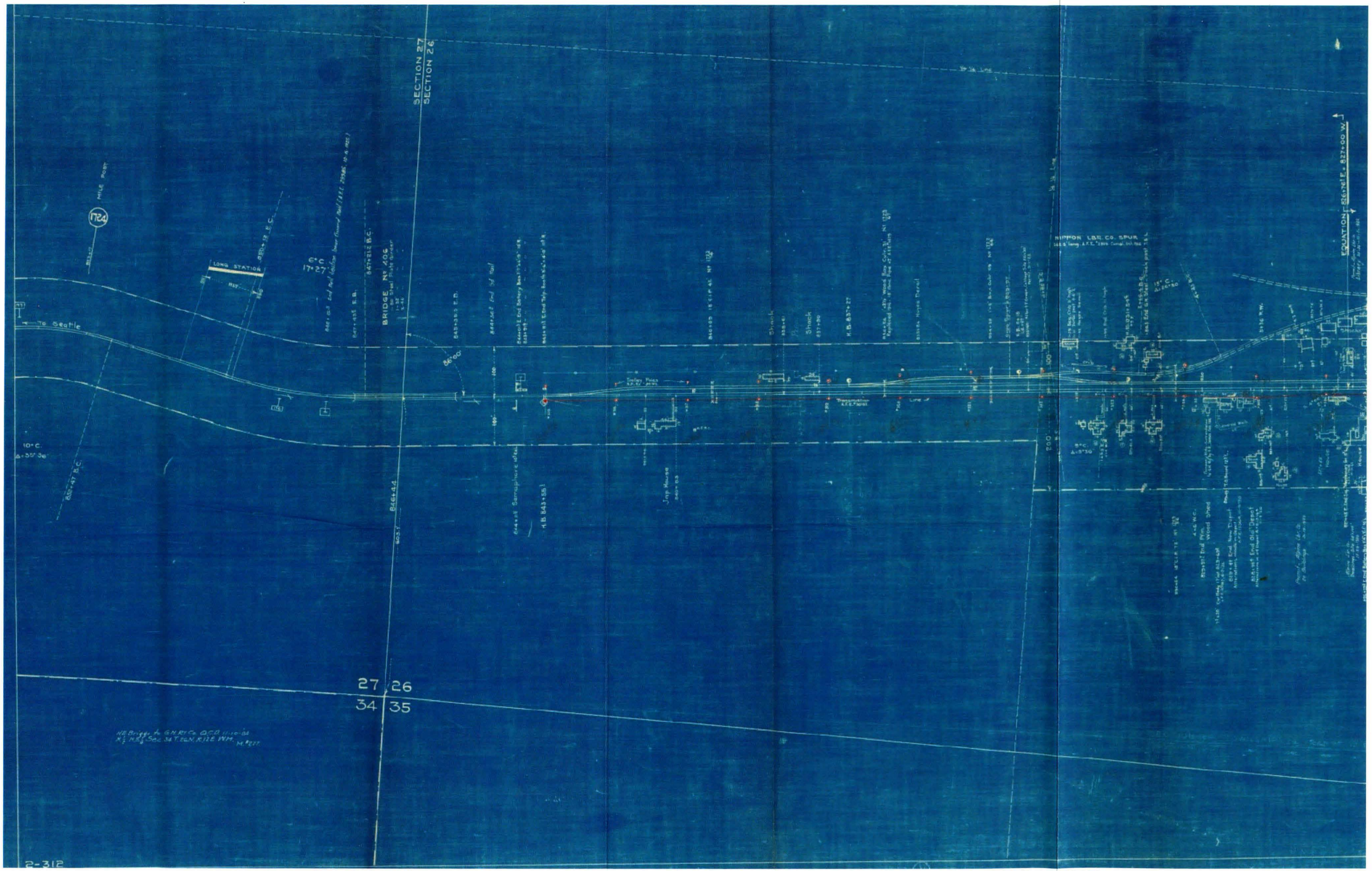


Figure 50. 1918/1927 Great Northern Railway Engineering blueprint map of Alpine, left half (Great Northern Railway 1927).

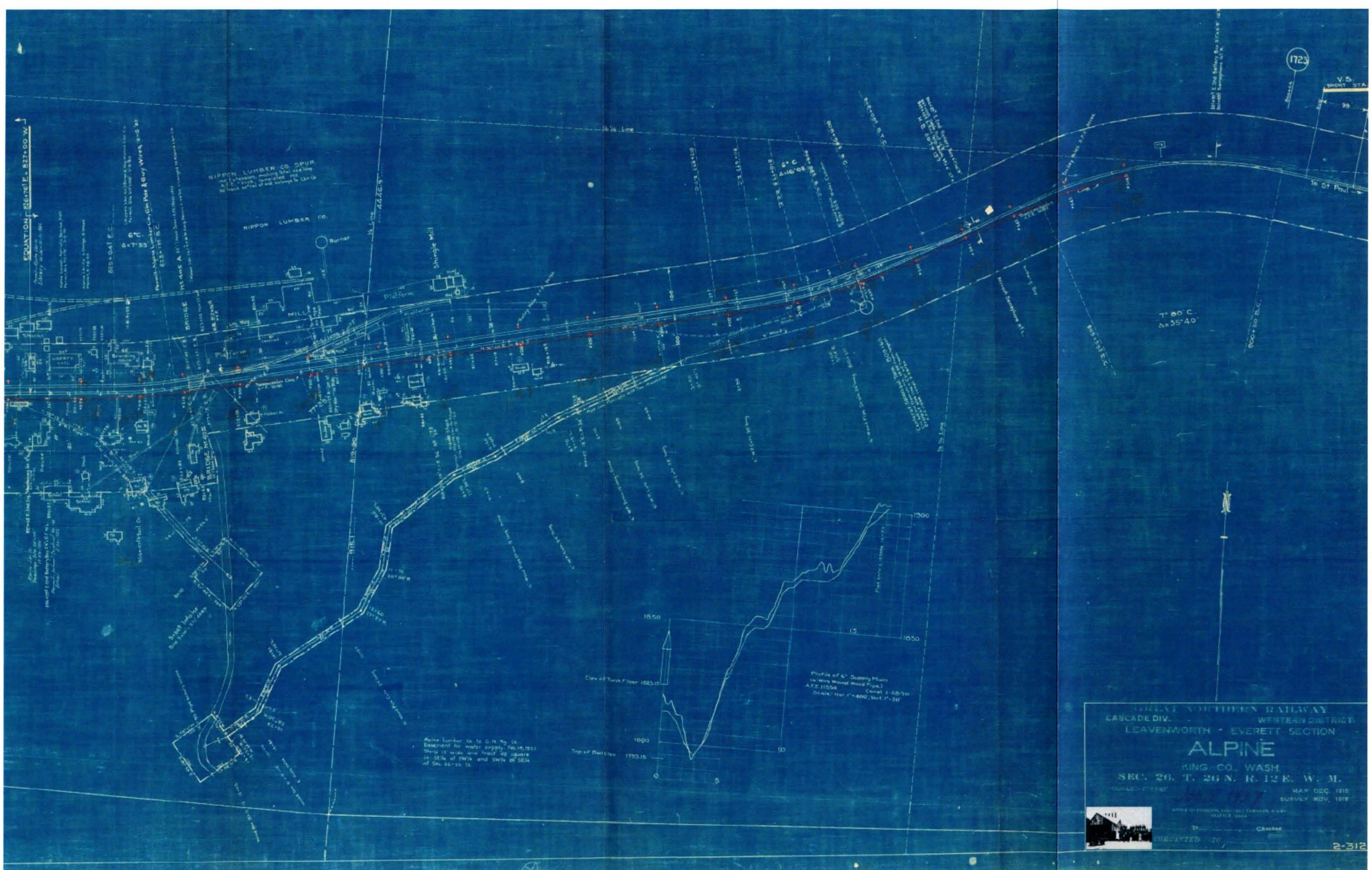


Figure 51. 1918/1927 Great Northern Railway Engineering blueprint map of Alpine, right half (Great Northern Railway 1927).

The 1922 map is part of a whiteprint map that appears to be a revised version of the 1918/1927 blueprint engineer map, with "10-31-'22" written on it, presumably meaning it is an October 31, 1922 update. There are some minor differences between the 1918, 1922 and 1927 maps. These include steps east of Carroll Creek and south of the railroad tracks that are shown on the 1922 but not the 1918/1927. The transmission lines and trolley poles that parallel the tracks are located on the 1918/1927 map, but are not shown on the 1922 map.

A 1926 Sanborn Fire Insurance map was also located (Figure 52). Sanborn Fire Insurance Maps, created since 1867, are "designed to assist fire insurance agents in determining the degree of hazard associated with a particular property" (Ristow 2014). These maps illustrate in extreme detail the shape, size and construction of dwellings, factories and commercial buildings. For example, they typically include fire walls, windows and doors, sprinkler systems, roof types, widths and names of streets, property boundaries, building functions, street addresses, and block numbers (Ristow 2014). These maps were created for various companies throughout the United States and Canada.

The Sanborn Fire Insurance map in Figure 52 is labeled "Febr. 1926, Skykomish, Wash" but clearly depicts a portion of the town of Alpine. I obtained this map from Bob Kelly of the Skykomish Historical Society. It shows only the northeast part of the town, north of the railroad tracks. It shows the Alpine Lumber Company mill (drawn in great detail) and some buildings to the west. As compared to the other maps, this map does not

Figure 52. 1926 Sanborn Fire Insurance Map of northereastern portion of Alpine (Sanborn Map Company 1926).

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The Sanborn Fire Insurance map in Figure 52 is labeled "Febr. 1926, Skykomish, Wash" but clearly depicts a portion of the town of Alpine. I obtained this map from Bob Kelly of the Skykomish Historical Society. It shows only the northeast part of the town, north of the railroad tracks. It shows the Alpine Lumber Company mill (drawn in great detail) and some buildings to the west. As compared to the other maps, this map does not show the boarding house located just east of Liberty Hall on the 1918/1927 Great Northern Railway Engineer map , but there are more unidentified structures in the area where the boarding house should be. The map also shows houses or shacks north of the spur line and west of "Rocky Creek" (now called Carroll Creek); these are not seen on the 1918/1922 Great Northern Railway Engineer map.

There are records of several distinct buildings in the town. Two different railroad depots were constructed, and both were left standing for a time (Figures 53 and 54). No trace of either depot was discovered in the 2013 archaeological survey.

Figure 53. First ("old") depot at Alpine (Skykomish Historical Society Digital Collection 2013).

Figure 54. Second ("new") depot at Alpine (Skykomish Historical Society Digital collections 2013d).

Another interesting building is the largest public structure in town, listed on the blueprint as "Liberty Hall," but also called "Victory Hall" (see Figure 55). This building is described in detail in the1918 Nippon Lumber Company Annual Dance and Banquet program. It was constructed May 8 to June 22, 1918 and

> The plans called for a two-story building 28' x 60' with vestibules on outside. Lower floor to be divided into three rooms: a Red Cross work room, a kitchen and a pool and reading room. Second floor to be of one room only and equipped with a very good floor [Nippon Lumber Company 1918].

The second floor was intended for events like dances. No trace of Liberty Hall was discovered in the 2013 archaeological survey.

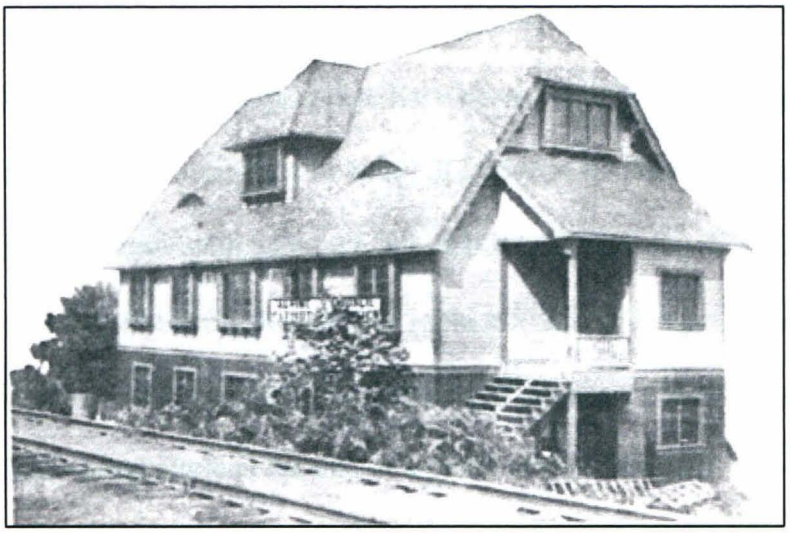

Figure 55. Alpine Council Victory Hall in 1918 (Nippon Lumber Company 1918).

Several other buildings are of particular interest because remnants discovered during the 2013 fieldwork appear to be related. These are the watertower foundation east of town (Feature 1), sawmill (Feature 2), a square rock/concrete foundation (Feature 3), laid brick floor (Feature 4), and school (Features 5-7). Each will be discussed in turn below.

The water tower was recorded as Feature 1 south of the tracks and at the eastern margin of the archaeological remnants of Alpine. The GPS location of the feature was at the center of the water tower depicted on the 1918/1927 GNR blueprint map. It was very likely constructed with wooden posts (now missing) placed atop the concrete footers (found in 2013) and supporting a cylindrical wooden tank (now missing). Figure 56 shows a contemporary water tower from ca. 1925, albeit on flat terrain, to show how Feature 1 may have looked. This watertower is shown on the 1918/1927 GNR Engineers blueprint map (Figure 6.10). The map reads "Center of 50000 Gal. Tank 809+65 Ctr. 60'

from ctr. Trk. 55.85' from tangent. 0 + 00 of pipe line = Ctr. of tank. A.F.E.115554. compl. 2-29-20." On this basis, it appears to have been a 50,000 gallon tank located 60 feet south of the tracks and completed in 1920. It is shown on the blueprint map at the end of a 6" wooden pipeline with an intake box uphill in Carroll Creek. There was an earlier water tower that Feature 1 presumably replaced. The old water tower can be seen adjacent to and south of the railroad tracks and east of the depot ca. 1911 in Figure 42, and is visible as an erased circle at the end of a pipeline with an intake box below the 1920 intake in Carroll Creek.

Figure 56. Example of a wooden Great Northern Railroad watertower. This one was located in Blanchard, California, circa 1925 (Schmidt and Vemeer 2002: Figure 26).

Feature 2 is a set of two large concrete footers, three small concrete blocks, a vertical metal pipe, and over 35 feet of concrete foundation wall trending roughly east-west. Because its GPS location overlaps with the north edge of the saw mill depicted on the 1918/1927 GNR blueprint map, it is clearly part of the saw mill building. The building lies north of the tracks and east of Carroll Creek. It is difficult to discern a close correspondence of the archaeological features and the blueprint map. The wall remnant

must be part of the north wall of the mill building. I believe the two 8 x 3 foot concrete footers, each with 8 bolt remnants, may have held engines or boilers. According to the 1926 Sanborn Fire Insurance Map (see Figure 57), there are a total of three "ENG. B's" two of these engines lay parallel to each other in the approximate location of the concrete footers that were located. The 2" vertical pipe with a flange at the top found in 2013 could be the "2" HYD. /t' 100' HOSE" depicted on the Sanborn map just south of the filing room. Figure 58 shows the mill building from the west.

Figure 57. Close up of sawmill from 1926 Sanborn Fire Insurance Map shown in Figure 52.

Features 3and 4 could not be related to specific buildings from the GNR blueprint or Sanborn maps. Feature 3, the square rock/concrete foundation, appears to lie about 40 feet south of the old depot building, based on our GPS readings. Feature 4, the laid brick floor, appears to lie about 40 feet south of the old depot building, based on our GPS readings.

Figure 58. Photograph of sawmill from the west in 1912 (University of Washington Digital Collection 2013k). Note the log way ramp as denoted in Figure 57 .

The school was recorded as Feature 5, 6 and 7 because it was thought to be so by Tim Raetzloff, and its GPS location overlaps with the north edge of the school depicted on the 1918/1927 GNR blueprint map. The archaeological remnants included three foundation segments and nine concrete columns. According to Raetzloff (2012), the school originally had one room and was added onto in 1920. Both sections of the building had concrete foundations and the addition had concrete inner walls and floor. Maggie Daheim said that the large, western portion of the school was the gymnasium. An undated photograph (Figure 59) shows the school's northern face. It is difficult to match the archaeological remnants to specific portions of the school building complex, but there are three discernible sections of the building in the photograph, and there were three separate archaeological features that could correspond with these.

Figure 59. Undated photograph of the Alpine School House, looking uphill to the south (Raetzloff 2012).

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CHAPTER VI

CONCLUSIONS

Synthesis

As a result of pedestrian survey for this thesis, a total of six debris scatters, seven features and 12 isolates were recorded. A total of 556 artifacts were recorded ,with 24 of them being diagnostic to time period of manufacture. In the field study area, the time period of historical significance dates from 1890-1970s. The majority of the artifacts were associated with domestic activities. Based on archaeological data alone it is difficult to say that Alpine was even associated with a logging mill, much less that its major function was logging.

The pedestrian survey documented a lack of structures one would think would be present. Compared to the rich record of the Great Northern Engineering map of 1918/1927, there is a poor visible archaeology record, although there may be more materials obscured by the thick underbrush and down tress. Only five building remnants could be located (seven features make up five distinct buildings) and of these, three could be connected to known structures on the Great Northern Engineering map. The three are the watertower, sawmill and school.

The history of the town of Alpine is in some ways poorly known and in other ways reasonably documented. At the beginning of my research, it seemed that the town of Alpine truly did not ever exist. In my early stages of research, I was confined to secondary sources that offered only brief bits of information. However, as my research

continued I was able to locate primary sources such as a 1918/1927 Great Northern Engineer Blueprint map and a 1926 Sanborn Fire Insurance Map as well as field report KI400 that had an assortment of newspaper and magazine articles, such as the 1917, 1918 and 1919 Nippon Lumber Company Annual Banquet programs and the 1920 and 1925 Alpine Lumber Company Annual Banquet programs. These items provided a wealth of knowledge to the historical write up for the town of Alpine.

The period of significance for the town of Alpine from the historic record dates from 1892 to 1930, which correlates with the field data results. . Based on primary and secondary historical sources we know that the Great Northern Railroad was completed sometime in 1892 and the land on which Alpine sits could have been a former Japanese work camp during the construction. On June 16, 1907 (Roe 1995:74) the land was acquired by the Cleman brothers and the Nippon Lumber mill was constructed in 1910. Over time, the town began to grow around the mill until its abandonment ca. 1930.

Recommendations

The town of Alpine has become a major interest to local history buffs. There are more than seven web/blog sites devoted to the town and there is even a Facebook page that people can follow. The recent interest in Alpine is causing an influx of visitors to the privately-owned property. During my 2013 field survey there was evidence of recent digging by looters, most likely bottle hunters. Some visitors are even documenting their visits and posting their findings on the web.

I have several thoughts of what to do with the abandoned town site. First, I would like to see it be protected from damage. It is somewhat remote and on private land, so these limit access to some degree, but it is reachable with four-wheel drive vehicles, and access directions have been posted on You Tube and other websites. Its location is well-known on numerous maps and websites, so it is far from the standards for site location confidentiality typically expected for pre-contact archaeological sites. Given these, I am not sure it can easily be protected from what is essentially trespass damage unless the owners wish to invest more significantly in fencing and signage. Someone could work with the landowner on the trespass issue.

A second way to protect the site from damage is to limit ground disturbance. On one of my visits to the site, I was informed that there is public interest in opening an Alpine museum in Skykomish, Washington, and that artifacts are being excavated and collected for the future museum. As an archaeologist this raises concerns. The intention of the advocates is laudable, with efforts to preserve their findings and share Alpine's history through a museum setting. However, their methods for recovering the artifacts are troubling to a professional. I was told that their provenience information was limited to taking a GPS points at the area they were digging and measuring depth they were pulling the artifacts out at with a tape measure. Although this is a good start, it does not provide sufficient information about location of finds to connect them with other archaeological remnants nor to connect them with locations of historic structures. I was also informed that at least two and a half feet of topsoil had to be removed before getting to the level of the historic period. I suggest that it would be better to leave the remains

alone, because at this depth any and all artifacts would be well protected. In any event, it would be helpful for professionals to work with interested local advocates about the potentially damaging effects of amateur archaeology.

Another idea is for a concerned advocate to raise money to buy the property that Alpine lies on and incorporate it into the Iron Goat Interpretive Trail. The Iron Goat Interpretive Trail is a 6-mile long trail that extends from Martin Creek to Wellington and follows the old Great Northern Railroad route (Stekel 2009). The Iron Goat Interpretive site is located on Highway 2, six miles west of the Stevens Pass Summit near Martin Creek and is owned by the Washington State Department of Transportation and maintained by Volunteers for Outdoor Washington and the United States Forest Service (Washington State Department of Transportation [WSDOT] 2014).

Although the Great Northern railroad no longer runs the Stevens Pass corridor, the presence of the camps and towns that arose from its birth still linger. Remnants of structures and items left behind by former residents are tucked away behind the shadows of second and third generation growth and its memory is carried on through stories such as those written by former resident Mary Daheim (1974). I hope that this thesis has added something to the story of this interesting little short-lived town in the mountains.

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